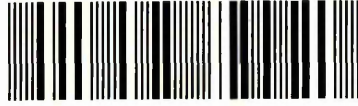


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# **The Bologna Process and Physiotherapy Education across Europe**

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A thesis submitted in partial fulfilment of the requirements of  
Sheffield Hallam University  
for the degree of Doctor of Philosophy

May 2014

## **Candidate's Statement**

I certify that this thesis, entitled 'The Bologna Process and Physiotherapy Education across Europe' is my own work and confirm that the work undertaken towards it has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy.

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B.Sc. (Hons), M.Sc. SIT (Manch.)

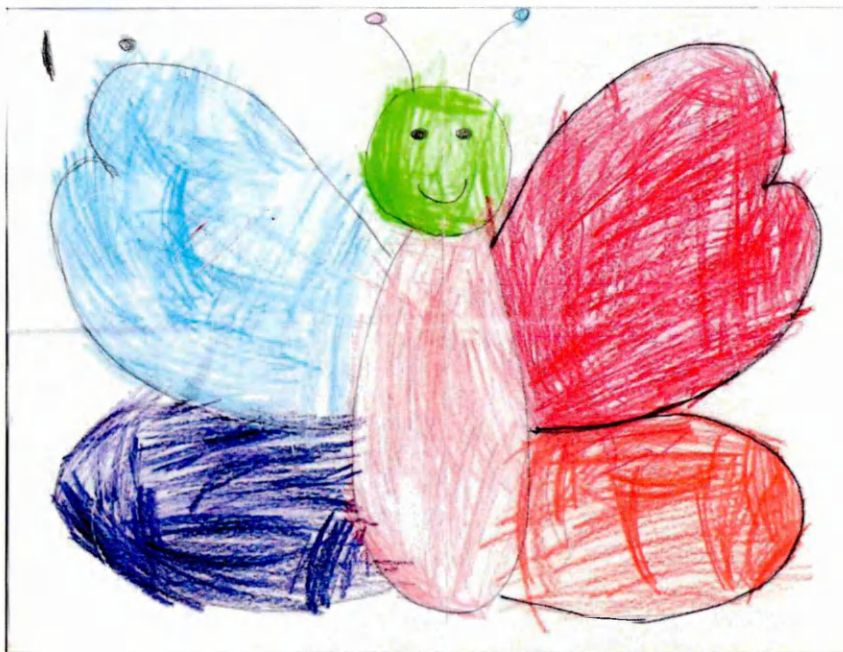
## Dedication

I am dedicating this thesis to my family ... especially my wife and daughters who have had to put up with my absence; my son; and my parents ... who have all persistently been pillars of support.

*The pictures on the following page were both created by my daughters using the rough paper that had resulted following the first drafts of this thesis. 'With love to my papi' is a water colour painting by Beata, aged 5. 'A colourful butterfly' is a pencil colour drawing by Keira, aged 3.*



*'With love to my papi' ... Beata aged 5*



*'A colourful butterfly' ... Keira aged 3*

*God, grant me the serenity to accept the things I cannot change,  
The courage to change the things I can,  
And wisdom to know the difference.*

Serenity Prayer

*A Pessimist sees the Difficulty in every Opportunity...  
... An Optimist sees the Opportunity in every Difficulty*

Winston Churchill

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Finally I would like to thank Jessica Busuttil and Brian Schembri for proof reading the entire document.



## Abstract

This study sought to understand the influences of the Bologna Process on physiotherapy education by looking at the extent of the adoption of the objectives of the Bologna Process and interpreting the impact on organisational governance. The aim was to draw out the influence that the Bologna Process may have had on physiotherapy in higher education across Europe. It was decided that the appropriate research methodology to address this aim would be Case Study Methodology and a Type 1 single-case holistic design was employed.

The case is defined as the influence of the Bologna Process on physiotherapy in higher education.

Two independent groups were purposefully chosen to investigate the case as they met the criteria for information-oriented and context-dependent participants: the Heads of Departments of physiotherapy schools across Europe and the Country Coordinators of the European Network of Physiotherapy in Higher Education (Enphe). A multiple method approach, using both quantitative and qualitative data collection methods, was adopted. A survey method was employed to gather data from both groups and the findings were analysed using SPSS and reported as descriptive statistics. A semi-structured interview method was employed to collect narrative data from twelve participants who were purposefully selected from the Enphe group. The interview transcripts were reviewed analytically and reported in a narrative manner by following the Framework Approach.

The participation rate to the survey method involving Heads of Departments from 26 countries was 45.3% (91/201); and that involving the Enphe country coordinators was 82.1% (23/28).

The Bologna Process was identified to have had an influence on the organisational governance of physiotherapy in higher education across Europe. Three key findings that emerged from this study show that these influences were on the degree structure and duration of programmes (including ECTS); Mobility and Quality. Issues of harmonisation & diversity were identified in relation to understanding the social factors that have determined and shaped any influences of the Bologna Process on physiotherapy in higher education.

The implications of the findings from this study are that they lay down a foundation for further study into the conceptual and strategic organisational designs for future physiotherapy education.

Key words: Bologna Process, physiotherapy education, Europe



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## **Glossary**

DS	Diploma Supplement
DR	Direct Realism
DWR	Direct Warrant Realism
ECTS	European credit transfer and accumulation system
Enphe	European Network of Physiotherapy in Higher Education
ER-WCPT	European Region of the World Confederation for Physiotherapy
EQF	European Qualification Framework
JTB	Justified true belief
NQF	National Qualification Framework
WBS	Web-based survey
WCPT	World Confederation for Physical Therapy (also Physiotherapy)

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# The Bologna Process and Physiotherapy Education across Europe

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This thesis is presented in a classical format with the Introduction, Literature Review, Rationale, Methodology, Methods, Findings, Discussions and Conclusions as Chapters 1 to 9. The purpose of this first chapter is to set the scene for this thesis with the introductions and background to the study and also to introduce myself as the author – my interests, my role and my approach. This is the beginning of what was to become a lengthy and laborious process.

# Chapter 1

## *The Introduction*

## 1.1 Introduction to the Study

The European Higher Education Area was established in the year 2010 following 11 years of what is better known within higher education politics and policy as the Bologna Process. Having started in 1999 with the Bologna Declaration<sup>1</sup>, the main objective of the Bologna Process was to ensure more comparable, compatible and coherent systems of higher education in Europe. These systems aimed for the students and graduates from universities in Europe to move freely from one country to another without restrictions of recognition of their qualifications and degrees. The Bologna Process served as the vehicle to arrive at the destination of the European Higher Education Area. Between 1999 and 2010 the signatory countries to the Bologna Declaration directed their reforms in higher education to align with the objectives of the Bologna Process. It was however well-recognised that the work of the Bologna Process would not finish by 2010 (Birtwistle 2009) and therefore the decade 2010 – 2020 was dedicated to consolidating the European Higher Education Area (BFUG report 2009). The persistent, unfailing and central two themes of the Bologna Process have been mobility and the architecture of the qualifications framework; whilst facilitating the mobility of Europeans was actually the substance of the Bologna Process. The key features of the Bologna Process that were recognised in order to achieve its aims included greater transparency in higher education processes, the general recognition of various degrees across Europe, the cooperation on quality assurance and the provision of flexible learning pathways within a context of lifelong learning.

Change, or proposed change, on a European level is typically met with enthusiasm. Yet, on a national level this same change is quite often met with cynicism and ‘foot dragging’ and is reflected differently across the diverse cultural roots and systems in Europe. As such the Bologna Process has resulted in a healthy debate on the core themes that directly influenced higher education, especially when these were viewed through the lens of mobility and recognition of professional qualifications. These core themes included the concepts of the qualification framework, learning outcomes and workload. These have been key pointers adopted by regulatory bodies to recognise

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<sup>1</sup> The Bologna Declaration is a Joint declaration of the European Ministers of Education who convened in Bologna on the 19th of June 1999 to formulate a road map for the creation of a European higher education area.

the academic degrees and qualifications obtained from other countries when comparing them to their own. This had and has implications for persons wishing to practise their profession in a country that is not the same country from where they obtained their qualification.

Physiotherapists, as health care professionals, whose training is placed within the echelons of higher education, have not been alien to the debates generated by the Bologna Process. This research study has sought to understand the influences and as a result the implications of the Bologna Process on physiotherapy education.

## **1.2 Background to the study**

Higher education is in continual transformation (Inayatullah and Gidley 2000) and in a European context it is no stranger to change (Enders and File 2006) recently resting largely on three key developments: the Sorbonne Declaration in 1998 and the Bologna Declaration in 1999 that aimed at making study programmes more compatible across Europe; and the Lisbon Strategy in 2000 seeking to reform Europe's education systems into an integrated, knowledge-based economy. Within these contexts physiotherapy education has also been experiencing stimulating times and the discourse on the Bologna Process and its implications has been the subject of discussions within the corridors of physiotherapy institutions. When this research started in 2007/2008 the Bologna Process was driving towards an important destination: the establishment of the European Higher Education Area by 2010. Essentially and effectively many physiotherapy education programmes were following certain trends. They had either adopted or were in the process of adopting procedures of institutional conformity - the so-called Bologna objectives. This led to the research question that has since guided this study: 'How has the Bologna Process influenced the governance of physiotherapy education across Europe?'



### **1.3 Role and intervention of the researcher**

This study was carried out in fulfilment of the requirements leading to a PhD degree. My role was that of the sole researcher and prime investigator. A physiotherapist by background, my interest in the topic has evolved from a personal special interest in the political development of physiotherapy as a profession and organisational management. This interest was strengthened through my involvement in the teaching of physiotherapy at undergraduate level at the University of Malta and also through my involvement in the organisation and administration of the profession in Malta. Completion of this PhD was necessary for me to pursue an academic pathway at the University of Malta and fulfilled my contractual obligations with my employer.

Throughout the course of this research I have held various posts that were linked directly to professional organisation both in Malta and on a European level. I was the elected President of the Malta Association of Physiotherapists (2007-2012); a member on the European Union Matters Working Group of the European Region of the World Confederation of Physiotherapists (2008-2010); a member on the Education Matters Working Group of the European Region of the World Confederation of Physiotherapists (2010-2012); and the Lifelong Learning Focus Group Leader within the European Network of Physiotherapy in Higher Education (2010-2012). My work with these entities was not related or connected. None of the work that I carried out within the European context was directly related with this research. My positions though have served to bring me in closer contact with the dialogue surrounding physiotherapy education on a European level.

My preceding degree at Master level is not connected in any way to this PhD. My Master of Science was obtained in Sports Injuries and Therapy. In a sense this research degree presents a complete shift in disciplinary approach, both on a conceptual and practical level. The shift was from practitioner to educationalist and signifies an interdisciplinary approach in physiotherapy professional management and organisation. As a physiotherapist my tendency and general approach towards patient management has been qualitative, constantly seeking to understand what was happening and how and why it was happening.



## Conclusion

This chapter has set the scene for this research by introducing the study and its author. The next chapter shall look through the literature on the Bologna Process and will lead on towards the rationale of this study.

# Chapter 2

## *Contextualising the Literature*

Chapter 2 of this thesis relates to the contextualisation of the literature. It leads towards the rationale, declaration of the problem statement and the aims & objectives of the study.

Chapter 2 is divided into four sections:

2.1: The literature search strategy

2.2: The Bologna Process

2.3: The extent and impact of higher education reforms across Europe

2.4: Physiotherapy in higher education

Section 2.1 describes the strategy and process adopted to identify the pertinent literature that was eventually reviewed.

Section 2.2 serves to provide an insight into the Bologna Process as it has been discussed in academic writings. The concepts of the Bologna Process are reviewed and its different issues addressed. Initially it introduces the Bologna Process with a description and discussion of its origin, substance, influence and awareness as represented in various academic publications. The differential impact of the Bologna Process as discussed by Heinze and Knill (2008) follows. The cultural, institutional and socio-economic influences are reviewed and discussed. The review on the Bologna Process is continued through references to its different pace across Europe, problems associated with it, its influence as a driver for change and finally vertical and horizontal governance perspectives.

Section 2.3 takes a closer look (in the form of a critical discussion) at a report that was purposefully commissioned by the European Commission's Directorate for Education. The extent and impact of higher education curricular reform across Europe was the subject of a research project commissioned by the Directorate-General for Education and Culture of the European Commission in 2006. They sought to gain insight into curriculum reform developments in five selected study areas (medicine, law, engineering, teacher training and history). An evaluation of the report appears appropriate in order to inform and guide this research into the influence of the

Bologna Process on physiotherapy education. The report looked into five reform elements: the two-cycle structure, competence-based learning, flexibility of learning pathways, mobility and recognition; and assessed their impact on access, graduation, employability, mobility, quality and cost-effectiveness. The report was reviewed in three areas: 1. the general national picture regarding curricular reform; 2. the state of art of the reforms at the level of the higher education institutions; and 3. the impact of the reforms at the level of the programmes.

Finally section 2.4 specifically addresses the context of physiotherapy education on a European platform. This section shall take a broad look at physiotherapy education across Europe. The initial focus is on the publication by Staes, Stappaerts and Myles (2001). The trends for physiotherapy in higher education shall be reviewed and finally the role of European-based organisations for physiotherapy education shall be explained.

When writing this chapter the intention was to explain the basic concepts of the Bologna Process and its implications; and to convey its European context. Most of the literature that was reviewed and to which reference is made emanates from reports and/or non-empirical publications. It is necessary to understand that the nature of this study and its uniqueness towards physiotherapy had implications on the literature review process. There was very limited research carried out and reported prior to this study. Furthermore this study adopted a constructionist approach (discussed in Chapter 4 of this thesis) and so the relevance of assessing the literature was considered in view of the engagement with the concepts of the Bologna Process rather than challenging them in an empirical way.

## 2.1 The literature search strategy

This literature review draws particularly on publications pertaining to the Bologna Process that were held in specific academic databases. A comprehensive search was conducted within the British Education Index (BEI), Education Resources Information Centre (ERIC), Australian Education, Physiotherapy Evidence Database (PEDro), the Cumulative Index to Nursing & Allied Health database (CINAHL), PubMed and Science Direct. In addition on-line European Union databases<sup>2</sup> and the reports and documents repository accessible from the 'Bologna Process – European Higher Education Area' website<sup>3</sup> were included.

An on-going systematic search was carried out through the academic databases that addressed the issues on the Bologna Process as they were developing. These are outlined in Table 2.1. The key term *Bologna Process* was searched with advanced searching alternatives that included the phrases '*and physiotherapy*', '*and higher education*', '*and change*', '*and health care*' and '*and theoretical considerations*'. CINAHL, PubMed, Science Direct and the Google Scholar databases were also searched using the keywords '*Bologna Process and Physiotherapy*' and '*Physiotherapy study programmes*'. A journal specific search was also carried out in 'Higher Education Management and Policy' and 'Advances in Physiotherapy'. The websites of professional organisations related to physiotherapy and physiotherapy education were visited in search for information on European physiotherapy education policy.

The search was limited to include only English-language publications or those that included an abstract in English; and that were published following 1998. The search results were positively considered if they fulfilled the criterion of addressing the Bologna Process. They were discarded if they related to physiotherapy topics that discussed practical issues such as exercise programmes, rehabilitation, training and pain. Those publications that were positively considered were scrutinised by adopting a 'traffic light system' (see table 2.2). Those that reported empirical data related to physiotherapy education or included a systematic and/or comparative analysis on the Bologna Process were given a green light. These were critically addressed. Those publications that were discussion papers on the historical, political, social or

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<sup>2</sup>[http://ec.europa.eu/internal\\_market/qualifications/regprof/index.cfm?action=profession&id\\_profession=1250&tab=general](http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm?action=profession&id_profession=1250&tab=general)

<sup>3</sup> <http://www.ehea.info/>

educational aspects of the Bologna Process were given the amber light and were noted for further consideration. They were lightly considered (red light) if the themes were not related to higher education or if they were related to the general educational strategy/performance based on an individual country.

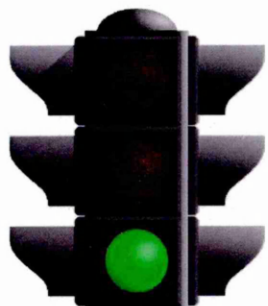

The search of the term '*Bologna Process*' in the Physiotherapy Evidence Database (PEDro) revealed zero results. PEDro was searched as it was marketed as a physiotherapy-dedicated database. PEDro appears to have been designed for use by health practitioners and consumers of physiotherapy. Its contents were restricted to randomised control trials, systematic reviews and clinical practice guidelines in physiotherapy according to body part and practice discipline.

Two official documents commissioned and published by European Union structures were also reviewed and incorporated into the literature review and discussion of this thesis. These were 'The European Higher Education Area in 2012: Bologna Process Implementation report' published by the Education, Audio-visual and Culture Executive Agency (EACEA P9 Eurydice) responsible for education within the European Commission and a document published in 2006 that compared national reports on the curriculum reform within medicine, law, engineering, teacher training and history.

TABLE 2.1: SEARCH STRATEGY FOR THE ACADEMIC DATABASES

Academic Database	Search Term	Advanced search	refined search	Results	Selected for review (traffic light system)
British Education Index (BEI)	Bologna Process			203	
		and physiotherapy		0	
		and higher education		199	
		and change		61	
			and Europe	22	
		and health care		1	19
ERIC, BEI and Australian Education Index (AEI)	Europeanisation			37	
		and higher education		17	
		and change		18	
		and health care		0	8
Pedro	Bologna Process			0	
Health Source: Nursing / Academic Edition (powered by EBSCO Host)	Bologna Process			31	
		and physiotherapy		0	
		and higher education		23	
			not medicine	9	2
ERIC, BEI and Australian Education Index (AEI)	implementing policy			616	
		and effects		78	
		and case study		16	
		and outcomes		2	2

TABLE 2.2: THE PUBLICATIONS REVIEWED THROUGH A TRAFFIC LIGHT SYSTEM. GREEN LIGHT  
PUBLICATIONS WERE REVIEWED IN MORE DETAIL THAN THE OTHERS.

	Year	Publication
	2001	STAES, F.G.M., STAPPAERTS, K.H. and MYLES, S. Physiotherapy Programmes in Europe: A Preliminary Report. <i>Advances in Physiotherapy</i> , 3(1), pp. 39-43.
	2006	ENDERS, J. and FILE, J. <i>The extent and impact of higher education curricular reform across Europe. Final report to the Directorate-General for Education and Culture of the European Commission</i> . The Netherlands: Centre for Higher Education Policy Studies (CHEPS).
	2008	HEINZE, T. and KNILL, C. Analysing the differential impact of the Bologna Process: Theoretical considerations on national conditions for international policy convergence. <i>Higher Education</i> , 56(4), pp. 493-510.
	1998	HUNT, A., ADAMSON, B., HIGGS, J. and HARRIS, L. University education and the physiotherapy professional. <i>Physiotherapy</i> , 84 (6), 264-273.
	1999	HIGGS, J., HUNT, A., HIGGS, C. and NEUBAUER, D. Physiotherapy education in the changing international healthcare and educational contexts. <i>Advances in Physiotherapy</i> , 1(1), pp. 17-26.
	2004	KWIEK, M. The emergent European educational policies under scrutiny: the Bologna Process from a Central European perspective. <i>European Educational Research Journal</i> , 3(4), pp. 759-
	2004	TROWLER, P. Policy and Change: Academic development units and the Bologna Declaration. <i>International Journal for Academic Development</i> , 9(2), pp. 195-200.
	2006	WASNER, M. Qualitätsmanagement in der Ausbildung Physiotherapie in den EU-Ländern: Eine vergleichende Untersuchung.
	2006	KETTUNEN, J. and KANTOLA, M. The implementation of the Bologna Process. <i>Tertiary Education and Management</i> , 12(3), pp. 257-267.
	2008	DAVIES, R. The Bologna process: The quiet revolution in nursing higher education. <i>Nurse Education Today</i> , 28(8), pp. 935-942.
	2008	WITTE, J. Aspired convergence, cherished diversity: dealing with the contradictions of Bologna. <i>Tertiary Education and Management</i> , 14(2), pp. 81-93.
	2009	BIRTWISTLE, T. Towards 2010 (and then beyond) – the context of the Bologna Process. <i>Assessment in Education: Principles, Policy &amp; Practice</i> , 16(1), pp. 55-63.
	2010	GORNITZKA, Å. Bologna in context: a horizontal perspective on the dynamics of governance sites for a Europe of knowledge. <i>European Journal of Education</i> , 45(4), pp. 535-548.



## 2.2 The Bologna Process

### 2.2.1 The origin of the Bologna Process

The Bologna Process<sup>4</sup> is an on-going pan-European initiative within the European higher education systems. It was originally created with the intention to harmonise common practices in the administration and regulation of academic degrees (Neave 2003). Since 2010 the process has developed to what is nowadays also recognised or referred to as the European Higher Education Area (EHEA)<sup>5</sup>. In the Bologna Declaration<sup>6</sup> of 1999 (p.1) it was envisioned that *'a Europe of knowledge [was] widely recognised as an irreplaceable factor for social and human growth and as an indispensable component to consolidate and enrich the European citizenship, capable of giving its citizens the necessary competences to face the challenges of the new millennium, together with an awareness of shared values and belonging to a common social and cultural space.'* This vision concentrated on a European identity whereby knowledge would lead towards common values shared by Europeans. By 2010, 47 countries<sup>7</sup> had signed up to address the objectives of the Bologna Process. Initially six objectives<sup>8</sup> were originally listed in the Bologna Declaration and a further three<sup>9</sup> were

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<sup>4</sup> The Bologna Process is called as such since the agreement was signed in the city of Bologna, Italy. It is common practice within the European Union that such agreements are named after the city in which they were signed.

<sup>5</sup> The European Higher Education Area (EHEA) was launched along with the Bologna Process' decade anniversary, in March 2010, during the Budapest-Vienna Ministerial Conference. As the main objective of the Bologna Process since its inception in 1999, the EHEA was meant to ensure more comparable, compatible and coherent systems of higher education in Europe. Between 1999 and 2010, all the efforts of the Bologna Process members were targeted to creating the European Higher Education Area, that became reality with the Budapest-Vienna Declaration of March, 2010. (Source: <http://www.ehea.info/>)

<sup>6</sup> The Bologna Declaration was signed as a joint declaration on the 19<sup>th</sup> June 1999 by 29 European ministers responsible for higher education in their respective countries. A further 2 signatories represent the different systems found in Germany and Belgium.

<sup>7</sup> The 47 countries signatory to the Bologna Process are Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Holy See, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, and the United Kingdom.

<sup>8</sup> The original six objectives of the Bologna Declaration in 1999 were

1. The adoption of a system of easily readable and comparable degrees
2. The adoption of a system essentially based on two main cycles
3. Establishment of a system of credits
4. The promotion of mobility
5. The promotion of European cooperation in quality assurance
6. The promotion of the necessary European dimensions in higher education

<sup>9</sup> A further three objectives were added in 2001. These were

1. The emphasis on lifelong learning
2. The involvement of universities and other higher education institutions and the students as competent, active and constructive partners.
3. Promoting the attractiveness of the European Higher Education Area.

added in 2001 following a ministerial conference in Prague. Since the meeting in Bologna in 1999, the ministers responsible for higher education have been meeting every two years with a purpose to examine the proceedings of the Bologna Process. Each of these meetings resulted in the publication of a *communiqué*. Even though the EHEA was formally established in 2010 through the Budapest-Vienna Declaration<sup>10</sup>, already back in 2009, it had been recognised and reported that not all of the objectives would have been reached by all the participating countries (Bologna Follow-up Group report, 2009). As a result the initial agenda of the Bologna Process was revisited and extended to 2020 (*Leuven/Louvain-la-Neuve communiqué* 2009). The Bologna Process is not legally binding in the stricter sense of European Union directives.

## 2.2.2 Substance of the Bologna Process

The recurring, constant and principal themes of the Bologna Process are essentially two: mobility; and the manner in which any given qualifications are gained (often referred to as the 'architecture') (Birtwistle 2009). Mobility symbolises the substance of the Bologna Process, that is, to facilitate work migration (Davies 2008). The architecture integrates the qualifications frameworks, credits and learning outcomes which together would appear to validate the qualification gained by the successful university graduate. These themes are explicated within the objectives of the Bologna Process.

As with most European affairs, the Bologna Process is not short of controversy with exponents on both sides of the spectrum, in favour and against (Neave 2003, Witte 2008, Birtwistle 2009, Patrício, Harden and Lilley 2010). It appears that a key critique revolves around the issue on the inclusion of the word 'harmonisation' (Neave 2003) that had appeared in the prequel document to the Bologna Declaration, the Sorbonne Joint Declaration in 1998<sup>11</sup>. The idea of harmonisation, and hence the convergence of common practices was interpreted to stifle the diversity (Witte 2008) that ultimately distinguished the different European systems from each other. Any attempt to harmonise a system such as higher education into a homogenous European system

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<sup>10</sup> The Budapest-Vienna Declaration was published in 2010 and officially launched the European Higher Education Area (EHEA).

<sup>11</sup> The Sorbonne Joint Declaration was signed by the four Education Ministers-in-charge from France, Germany, Italy and the United Kingdom on 25th May 2008, titled 'Joint declaration on the harmonisation of the architecture of the European higher education system' and is regarded as the catalyst for the Bologna Declaration.

may be understood to lead to the loss of national identity. Higher education is however deeply embedded into the culture of European countries and as a consequence, whilst the Bologna Process has resulted in a healthy debate on certain key aspects of higher education, evolutionary change has occurred slowly and over an extended period of time (Birtwistle 2009). It is not surprising therefore that the Bologna Process has been extended into the second decade of the second millennium.

### **2.2.3 The influence of the Bologna Process**

It has been surmised by Davies (2008 p.1) that the Bologna Process will affect '*millions*' of nurses who are involved in all aspects of the profession (practice, education and research) and in this respect the trends created as a result of this cannot be ignored (Birtwistle 2009). The political decisions that have been taken under the influence of the pressures of globalisation have resulted in a strain on the traditional roles of nation states (Alexiadou 2007) with a result that the landscape of higher education is changing too. Even though the overall registered physical mobility across Europe has not been as extensive as what was anticipated, nonetheless intellectual mobility has increased (Birtwistle 2009). This effectively meant that the transparency between the different educational systems was even more important. As a consequence of this, the influence of the Bologna Process took on a more significant meaning. The educational processes in the United States (Terry 2007) and Australia (Zgaga 2006) have also kept a close watch on the developments of the Bologna Process, as this was serving for the European higher education institutions to be better prepared for their challenges (Trowler 2004), with the consequence that they were appearing to be more competitive.

### **2.2.4 Awareness of the Bologna Process**

The extent of the awareness of the Bologna Process amongst academics is not clear even though the Bologna Process has been a hot topic since 1999. Many in the academic professions are still unaware of the consequences of the Bologna ideas (Kwiek 2004) possibly due to a lack of strategic awareness and ineffective communication (Kettunen and Kantola 2006). One cause for this could be that the Bologna Process has been led by ministerial and government agencies. It may be

surmised that at the different levels of authority a diverse level of responsibility exists that has had an overall diverse influence on the successful implementation or achievement of the Bologna objectives. Perspectives may have changed as the Bologna principles were passed down the command chain. Kettunen and Kantola (2006) outlined a number of these different perspectives at the different levels of policy enactment that are presented in Table 2.3. They reflect how the perspectives at each of the levels will differ and how they are translated into different learning and growth patterns. As the perspectives changed in this top-down approach the risk was that the original intended consequences of the Bologna Process would also begin to differ. As such it is possible that the reforms in higher education have not been conceptually linked to the Bologna Process. The views and understandings of those who would finally be putting the policies into action need to be understood too to ensure the successful implementation of policy.

TABLE 2.3: THE DIFFERENT PERSPECTIVES AT EACH LEVEL OF POLICY ENACTMENT. LEARNING & GROWTH WILL BE ULTIMATELY INFLUENCED IN A DIFFERENT WAY ACCORDINGLY TO THE PERSPECTIVES, WITH A FINAL OUTCOME THAT THE ORIGINAL INTENDED CONSEQUENCES MAY BEGIN TO DIFFER. ADAPTED FROM KETTUNEN AND KANTOLA (2006)

Level	Perspectives	Process and Structures	Learning and growth
European	Competitiveness of Europe Mobility	European Higher Education Area European Research Area	Bologna Process Strategic awareness
National	Economic growth Regional development Educated labour force	Structure of HEIs and degree programmes Student intake National innovation system	Education Policy Competition policy Regional policy
Higher education institution	Regional development Student and employer satisfaction	Efficient internal processes and structures Quality assurance	Capabilities of workers
Faculty / Department	Regional development Student and employer satisfaction	Structure of degree programmes Structure of jobs and knowledge Quality assurance	Knowledge management skills Recruitment of competent workers In-house training
Degree programme	Student satisfaction Outcomes of research and development	Curriculum Research and development	Capabilities of academics
Academic	High quality of learning of students	Workload plans Quality assurance	Capabilities of academics Personal development plans
Student	Obtained qualifications Employment opportunities	Personal study plans	Tutoring High quality education



## 2.2.5 The differential impact of the Bologna Process

Deep integration in higher education policy across Europe seemed unthinkable until 1999 (Heinze and Knill 2008). Previous to that, any co-operation was limited to European Union (EU) mobility programmes (Gellert 1999). Following the signing of the Bologna Declaration and notwithstanding the legally-unbinding nature of the agreement, governments have been working towards the convergence of systems of higher education (Huisman and Van Der Wende 2004). It has been repeatedly noted however, that there has been a different degree of involvement across Europe (BFUG report 2009). The extent towards convergence on higher educational policy in the course of the Bologna Process and also the reasons for national differences in the convergence effects have been posed by numerous authors (Neave 2003; Heinze and Knill 2008; Witte 2008; Witte, Van der Wende and Huisman 2008). Heinze and Knill in particular presented a paper with the intention of serving as a guide for a more comprehensive, systematic and comparative empirical study on higher education. They discussed the opportunity of a starting point for further theoretical and methodological reasoning concerning research on higher educational policy by addressing the issues of convergence of European higher educational systems in the course of the Bologna Process through theoretical questions concerning the domestic impact and the role that national factors play in determining these effects. Whilst keeping clear from any particular educational processes they set a model context for investigation. Whilst their paper focused on factors related to policies adopted by national governments, this current study aims to look at the outcomes of education programmes in physiotherapy as they have been influenced by the Bologna Process. Heinze and Knill mapped out national conditions of cross-national policy convergence by considering the literature on Europeanisation and identified three factors: cultural, institutional and socio-economic factors as having the potential to influence the effectiveness of the convergence mechanisms. These factors are considered to interpret the convergence of physiotherapy programmes in higher education.

### 2.2.5.1 Cultural factors

The cultural characteristics have been described in different dimensions from political systems to social systems, education, linguistics, religion and history. Policy sharing and transfer occurred more easily between countries with strong cultural linkages (Heinze and Knill 2008). Shared beliefs and similar perceptions towards problems and their solutions have led countries that share cultural characteristics to adopt similar policies (Lenschow, Liefferink and Veenman 2005). In their search for relevant policy models, decision-makers have looked at the experiences of those countries with which they shared a close set of cultural ties. They found that cultural similarity had a strong influence in determining the impact and effectiveness of the convergence mechanisms (Strang and Meyer 1993).

Within the context of cultural similarity, Heinze and Knill postulated that those countries that experienced a greater cultural similarity would decode the arguments and proposals communicated within the Bologna Process in a similar way. As a consequence similar reforms would be introduced that would serve to demonstrate the cultural vitality of European states (Neave 2003). Their hypothesis was that if the similarity between the cultures of the universities across Europe was greater, then greater convergence of higher educational policy would take place under the influence of the Bologna Process. Cultural factors also included having a national education strategy that was founded around higher educational activities and characterized by the university cultures in each of the national higher educational systems.

Convergence would be facilitated or impeded depending on the similarity or difference in the traditional systems of higher education. Gellert (1999) referring to the changing conditions of teaching and learning in European higher education stated that *'perhaps the single most important influence on curricular and other organizational aspects of institutions of higher education in Europe is the fact that the traditional homogenous university systems have become diversified through the development of alternative sectors in higher education'* (p9). These alternative sectors probably represent what universities are more associated with today that is, practically-oriented tertiary institutions that are responsive to, and accountable to society and the tax-payer, and socially more open by offering wider participation and with shorter study periods. This

differentiated process has possibly resulted as a response to the economic and technologic needs of each individual country and their unique employment systems (*ibid.*). Arguably, if diversification in traditional systems and differentiation of organisational systems were already noted and recorded in 1999, at the onset of the Bologna Process, then today, more than ten years later, such a process would appear to have a more profound impact on the organisational aspects of institutions of higher education. Similarly, however, and within the cultural context, the effect of the convergence mechanisms would be influenced by any of these three situations: first the educational systems' traditional foundations; second the political pressure; and third European integration (Heinze and Knill 2008).

- Traditional prevalence

Traditional prevalence may be described as the generally accepted influences of tradition embedded within the culture of a country. Traditional prevalence, particularly in the design of academic degrees, has been a determining factor that shaped learning events in higher education. To a large extent it has influenced any amount of change whenever it was necessary (Gellert 1999). These influences would appear to be smaller in those systems which possess a well-defined structure, especially in terms of curricular design and degree structure. Consequentially the new expectations resulting from the Bologna Process should seek closer convergence between those countries that between them have shown a higher similarity in university culture (Heinze and Knill 2008).

European higher education is highly differentiated making it difficult to compare the advantages and disadvantages of the respective systems. Gellert (1999) proposed a model of looking at the past to understand the present. Three major systems were identified that historically shaped the elements of higher education and which have influenced developments elsewhere. The personal development model, or the model of liberal education, has influenced British higher education for more than 300 years. A student's character or personality formation came about through learning and specific communal lifestyle and extra-curricular activities. In contrast, in Germany, the research model or Humboldtian system prevailed. This was achieved through a specific understanding that knowledge was gained solely through empirical methods,



focused more on the discipline rather than the student. The third system was the Napoleonic or French system known as the professional training model that placed most of the emphasis on learning for the profession. Although not exclusive, Gellert found that these are still present in a predominant way within national structures even though research, professional training and personality development are features of all higher education systems. Most Mediterranean and Eastern European countries would appear to follow the professional training model, whilst central European countries tend towards the research model. Most English-speaking countries were strongly influenced by the personal development model.<sup>12</sup>

- Politics

Either through large-scale reform programmes or single pieces of legislation, national governments have from time to time influenced organisational change in higher education. Before 1999, many governments had already implemented changes and reforms so that their educational systems would become more compatible and competitive to other European systems (Gellert 1999). Following 1999, European countries have been engaged in a continued process in order to organise their higher education in response to the Bologna Declaration. The implications of harmonising systems on a European level have raised concerns particularly in determining the positive and negative aspects of the Bologna Process (Witte 2008). As a result of ongoing discussions the strong implication for harmonisation that was present in the Sorbonne Declaration (1998) has been replaced by a more moderate convergence around common practices (Neave 2003). Irrespective of the implications however, the Bologna Process continues to be directed by the conference of European Ministers responsible for higher education seeking to stick to their agenda.

- European integration

Whilst it would appear that degree structures, political reforms, secondary education and expectations of the labour market have influenced changes in the organisation of teaching and learning in European higher education, especially prior to 1999, Gellert's

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<sup>12</sup> Further descriptions on each of these models are found in Appendix 1

argument that the European integration process itself could be the most consequential determining factor for change is still appropriate. Spearheaded by the ERASMUS<sup>13</sup> programme, universities had to adjust their course structures and study programmes to meet the complementing experiences, expectations and quality levels which existed in other systems; the students who participated in these exchanges had reasonable expectations that their study periods abroad, including their participation in exams, would be recognised and accepted equivalently by their home university. Many changes before 1999 occurred with little awareness of both the governments and the public in general (Gellert 1999); however it would appear that with the agreement of the Bologna Process these changes have become more evident. The need for an evaluative analysis of European systems of higher education, possibly by looking closely at European community-led developments, warrants a reconciliation of the changes with national and regional traditions and structures.

#### **2.2.5.2 Institutional factors**

Institutional approaches have had a particular influence on the analysis of policy without a direct lead towards convergence or cause of convergence *per se* (Heinze and Knill 2008). The impact of the convergence mechanisms would have stronger effects among states that have similar institutional structures. Institutional factors, just like cultural factors, are assumed to influence behaviour by determining the options of action and forms of interaction, as well as the political resources available. The institutions are the formal organisations that formulate the policy and structure its process. They are responsible for agenda-setting, formation of opinion, resolution of conflict, formation of consensus, decision-making and implementation (Seibel 1997 in Heinze and Knill 2008). Institutions may be dictated by constitutions and laws and may include constitutional bodies (such as government or parliament), public organisations or intermediary organisations. Universities and similar educational organisations such as Universities of Applied Sciences, Polytechnics and Colleges represent such institutional structures. The Bologna Process has reached out to these educational organisations that find themselves in the higher education echelons. Every country is

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<sup>13</sup> The ERASMUS programme, or European Region Action Scheme for the Mobility of University Students, is a European student exchange programme established in 1987. It currently forms part of the European Union's Lifelong Learning Programme 2007-2013, and is the operational framework for the European Commission's initiatives in higher education.

expected to have a central agency that oversees the implementation of the Bologna agreements, with each higher educational institution playing an essential role in the delivery of the intended outcomes.

Within the structures of the individual higher education institutions, the capacity to bring about reforms - and hence policy change and policy transfer - is understood to be determined by key persons whose authority is required for the reforms to take place. Furthermore, where physiotherapy education is delivered it could also be expected that a key person be present who is responsible for the supervision of the implementation of reforms in the physiotherapy educational process.

The reference to institutional factors highlights the impact of the different national points of departure (Heinze and Knill 2008) where national governments would tend to adopt only those policies that are in line with existing institutional structures. The expectation is that specific policies will spread among those countries that are characterised by similarity at an institutional level and also by the national government's policy preferences (*ibid.*).

#### **2.2.5.3 Socio-economic factors**

In addition to a country's cultural and institutional elements, the socio-economic characteristics will also influence policy convergence (Heinze and Knill 2008) in such a way that those countries that face economic vulnerability would adapt to European policies much more easily (Schmidt 2002). A change of policy and the implementation of new or different measures may result not only in the event of policy-specific problems but also as a result of fiscal and economic restrictions, low economic growth or increasing national debt that may restrict the state's capacity to solve policy problems. Besides the socio-economic factors, the creation of a European Higher Education Area within the framework of the Bologna Process had to also consider the pressures resulting as a consequence of the globalization phenomenon, since the higher education policy models across Europe were already being developed as a response to this (van der Wende 2003). Heinze and Knill hypothesized that the convergence of new approaches would be greater among those countries with similar socio-economic conditions including problems of brain-drain, low international



reputation of national universities, low graduate outputs, academic unemployment or insufficient financial resources. Despite the case sensitivity of policy-specific problems, the international competitiveness of national higher education systems requires further consideration within the context of the Bologna Process. The ability to attract students to study in a foreign university, for example, relates to various performance indicators, including both inputs and outputs, such as the percentage of foreign students and researchers, funding and staff capacities, student and academic mobility, drop-out rates and duration of study.

Heinze and Knill suggested that another reason for convergence is the similarity of socio-economic structures. Countries that faced similar political problems were more likely to adopt similar policies. General structural indicators may be considered such as the status of economic development. Yet, for the transfer of higher education policies, those knowledge-based factors like human resources and their educational background, the technical infrastructure and the development of high-tech industries or the expenditure on education, must also be considered.

### **2.2.6 The setting of a different pace for different Europeans**

The plan for the implementation of the Bologna objectives has been set at a different pace in different European countries; differentiated principally by the challenges faced in the transition countries<sup>14</sup> (Kwiek 2004). The Bologna Process may appear to have been more successful in promoting its agenda in Western European states as opposed to those countries that are still experiencing a combination of new and old ways in their higher education systems. The financial support for the implementation of contemporary reforms in higher education in the transition countries appears to have been constrained (Kwiek 2004). Countries that differed significantly in their social practices, beliefs, values, emotions and frames of reference did engage in different methods of changes in their higher education policy as a result of the Bologna Process (Trowler 2004). As a consequence, and considering the geographical distribution of Europe, the economic challenges and the political scenarios, it is understandable that keeping up with the pace of the Bologna reforms is a tremendous challenge. It would

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<sup>14</sup> Kwiek (2004) made reference to transition countries as those central and eastern European countries including the Balkans that have emerged following the fall of communism.

be reasonable, therefore, to believe that such differences in approach would imply different national conditions contributing towards the national identity and hence distinguishing one country from another. Such differences could have implications on the comparison of change practices in higher education.

### **2.2.7 Problems linked with the Bologna Process**

The Bologna Process entails a number of political actions that have been interpreted and analysed at a European level (Neave 2003) and which have exposed a number of problems that are linked to its operationalisation. Kettunen and Kantola (2006) highlighted three of these problems: the first, insufficient funding to implement the education policy; the second, misalignment of the funding mechanisms towards the activities that may be followed to reach the desired objectives; and third, a lack of strategic awareness that would be conducive to driving forward a European education policy. The links between the objectives may have been understood and yet the communication was not so effective (Kettunen and Kantola 2006); the academic professions are mostly unaware of the consequences of the Bologna ideas (Trowler 2004, Kwiek 2004). Furthermore Kwiek (2004) pointed out that the Bologna Process had not risen to the conceptual level that was required to assist higher education systems in those central and eastern European countries that are still finding themselves in a state of permanent crises since the fall of communism.

### **2.2.8 The Bologna Process as a driver for change**

The Bologna Process may also be considered as a driver for change. In this sense it may have acted as a force that could have and would have stimulated change when change was perceived to be needed. In countries where higher education is well established as an institution and also in those transition countries still struggling to bridge their old practices with new ones (Kwiek 2004) initiatives like the Bologna Process have helped to bring about a state of readiness (Trowler 2004). This has influenced the realignment of institutional relationships, the refocusing of roles and the shift in patterns of power and changes in attitudes. It may appear implicit that the

Bologna Process was concerned with the harmonisation of processes even though terms like convergence were preferred (Witte 2008). Yet change and managing change does allow for diversity as different outcomes may be guided by different contexts that include history and culture (Trowler 2004). The expectations of academics in the transition countries were precisely to have clear recommendations on what to do and how to do it (Kwiek 2004) and depending on their approach to change this would enable and encourage diversity in the process even between similar institutions in the same country (Patrício, Harden and Lilley 2010).

### **2.2.9 Governance perspectives**

The uniqueness of the Bologna Process due to its various aspects has triggered a lot of debate on the challenge of vertical governance (Gornitzka 2010). The implications of this vertical governance are reflected in the manner in which individual countries or institutions have developed accordingly to, and with the Bologna Process. Different countries are characterised by territorial boundaries and consist of institutions or institutional spheres that are guided by their independent operational logic and principles (Gornitzka 2010). The vertical perspective takes into consideration a shared basic idea between institutions of the same country on policy objectives; and their concerns on how and why to achieve them. The horizontal perspective, on the other hand, considers how on a European level, the higher education institutions are engaged between them on aspects of common governance – such as the implementation of the Bologna Process. Correspondingly, in each country/institution, a similar situation may result between different entities such as different higher educational institutes (within a country) or different faculties (within a university) or different faculty departments (within a faculty). An illustration of this is reflected in figure 2.1. An exploration into the implications of reforms on higher education across Europe, from the same vantage point such as physiotherapy in higher education, within a European perspective, therefore presents a horizontal view and a nuanced view of the implications of the Bologna Process on physiotherapy.

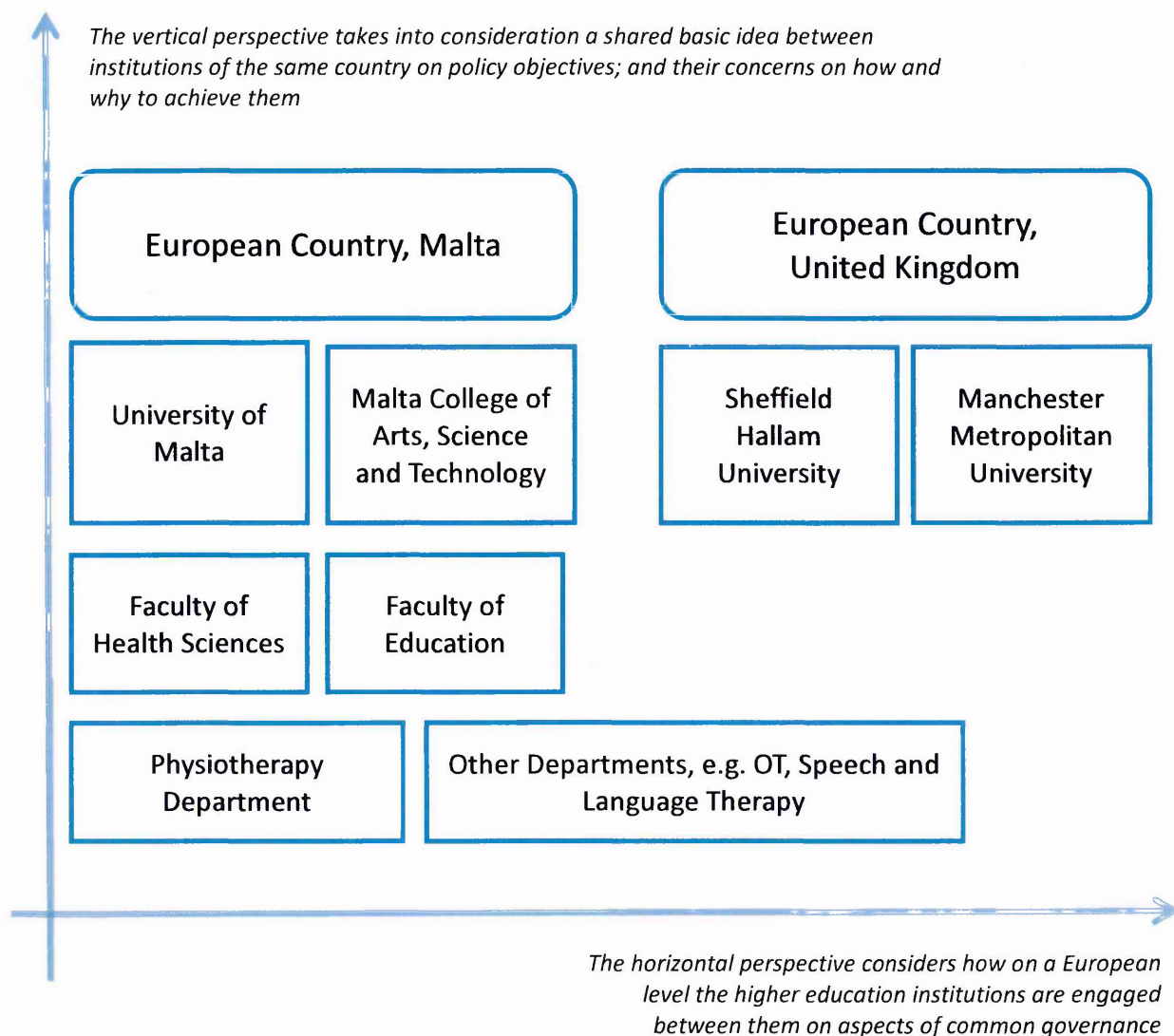


FIGURE 2.1: ASPECTS OF VERTICAL AND HORIZONTAL PERSPECTIVES FOR INTERPRETING THE BOLOGNA PROCESS USING TWO SCHOOLS IN TWO COUNTRIES AS EXAMPLES



## 2.3 The extent and impact of higher education reform in medicine, law, engineering, teacher training and history across Europe

### 2.3.1 The general national picture regarding curricular reform

National reports on the curriculum reform within medicine, law, engineering, teacher training and history were compared by Huisman, Witte and File (2006). They revealed that 32 of the 46 Bologna signatories had structural arrangements in place for only certain elements of the Bologna Process objectives, namely the two-cycle system, the diploma supplement and the European Credit Transfer and Accumulation System (the ECTS). The actual implementation of these activities varied from full implementation at all higher education institutions to implementation in one sector and to gradual implementation at all institutions. For example, the understanding of competence-based learning – an activity linked to the first three objectives, differed between countries. This may have resulted in a conceptual confusion. Competence-based learning was linked to different issues on various levels: national and international; macro and micro-level; and administrative and practice (see box 2.1).

International and national student mobility was reportedly threatened by the increasing existence of curricular diversity. The latter had resulted in response to the higher education institutions' drive towards more institutional autonomy and independent profile. In this context, the report highlighted the tensions that existed between the policy goals of diversity/autonomy and comparability/permeability.

#### Competence-based learning was linked to various issues on different levels

Levels:	Examples:
National-level issues	Qualifications frameworks, quality assurance
Supranational issues	European Qualifications Framework
Micro-level issues	Definition of learning outcomes or competencies at the level of the curriculum
Practice issues	Day-to-day practice of competence-based learning

BOX 1: COMPETENCE-BASED LEARNING WAS REPORTED TO BE UNDERSTOOD ON DIFFERENT LEVELS IN DIFFERENT COUNTRIES AND ACROSS DIFFERENT PROGRAMMES



The use of the term 'recognition' was reported as to be wide-ranging and extended from the recognition of conferred degrees and professional qualifications to the recognition of prior learning and the recognition of study periods abroad. In this sense the term recognition was not well qualified or described.

Overall there was a broad support for the Bologna Process amongst the five disciplines studied. A major struggle was reported with the implementation of the two-cycle degree structure and in particular with the requirement of the Bachelor-level qualification being relevant to the labour market. The report placed a special emphasis on nursing and physiotherapy in comparison to medicine:

*"In medical education, [the difficulty with the two-cycle degree structure and in particular with the requirement to have a Bachelor-level degree relevant to the labour market] is related to the fact that medical education in most countries is geared towards educating medical doctors at a qualification level at least equivalent to a Masters level (requiring six years of full-time education following EU regulation). Education in health professions at lower qualification levels such as nursing or physiotherapy is mostly organised separately. Establishing a Bachelor degree in medicine would thus require not only a profound restructuring of university curricula but also a new ordering of the entire labour market in the medical field, and of the relationship between education for medical doctors and other health professions. As the Swiss case study shows ... there is scope for such a reform, but it is not trivial at all." (p47)*

It can be argued that the implication is that the training required for medical practitioners is different, when compared to nursing and physiotherapy, not only at the level of competences (as is expected from different professions) but also at the level of curricular design and duration. This has resulted in a distinction between medical doctors and the other health care professions whose education is reported at a *lower level*. This distinction is closely watched by non-medical practitioners who feel that the professional differentiation is not appropriate. This encourages the discussions for raising the entry-level to practice physiotherapy to a Master level as observed in Belgium (Craps 2012) or even to a Doctoral level as noted in the USA (APTA Vision Statement 2020). It is correct, in my opinion, to explain that the title of 'Doctor' conferred to medical practitioners is not the result of an academic achievement but a professional title. As a consequence further confusion surrounding the academic and professional titles is heightened when academic achievement leads to the corresponding academic level of master (2<sup>nd</sup> cycle) or doctoral (3<sup>rd</sup> cycle). The distinction between the professions prevails at least on a competency level. A clear example of where this confusion does not exist is in Italy where all degree graduates

are conferred the title of *Dottore* (Doctor) whilst the medical practitioner is not referred to as *dottore* but *medico* (medicine man) (Mayo 2012).

### **2.3.2 The state of the art of reform at the level of the higher education institutions**

Huisman, Witte and File (2006) also compared the highest level of development at the higher education institutions and reported that between 61 and 86% of the respondents amongst the five study areas agreed or strongly agreed that mobility, recognition and flexibility had been endorsed in the reform agendas of their departments, especially international staff mobility, international graduate mobility and recognition issues. 13% disagreed or strongly disagreed with the two-cycle structure. The important drivers for change towards the reform agenda of Bologna Process were European policies, institutional management and developments in other higher education institutions whilst professional organisations and employers were reported to have had less importance. The full realisation of the elements of the reform process pointed towards considerable progress in the implementation of the ECTS, the diploma supplement, adjustment of curricula and the two-cycle structure, however this was not translated into increased learning flexibility (variety of entry and exit points; and recognition of prior learning) and mobility. It was recommended that these aspects required separate careful attention tailored to the specific disciplines.

### **2.3.3 The expected impact of the reforms at the level of the programmes**

The overall interpretation of the expected impact of the reforms at the level of the programmes was reported by Huisman, Witte and File (2006) to be very varied. 25-48% of the respondents agreed or strongly agreed to the anticipated positive impact on cost-effectiveness (25%), graduation rates (32%), employability (33%), and quality of education (39%), access (42%) and mobility (48%). 15-33% expected a not-so-positive impact. Scepticism was reported to be particularly evident on the impact of cost-effectiveness.

The expected impact of the reforms on access to higher education, graduation rates, employment, mobility, quality of education and cost-effectiveness at the disciplinary level were addressed with the following conclusions: First, the changes were too recent to effectively assess the impact. Second, the link between cause and effect was not always clear. Third, intervening variables, such as a *numerus fixus*, and other unintended outcomes could have distorted the potential relationship between the reforms and the outcomes. Examples of unintended outcomes were reported such as the pressing demand for shorter programmes that limited the opportunities for international mobility; and also the realisation that it was actually not so cost-effective when increasing the study time of a Master degree from 4 (or 4.5) to 5 years. Lastly, not all of the impacts were unambiguously positive. Widening access to any particular field of study had to be dependent on concrete demand-and-supply situations for services in that field of practice and not to aim to generally increase access to higher education.

## **2.4 Physiotherapy in higher education**

### **2.4.1 Physiotherapy education across Europe**

Staes, Stappaerts and Myles (2001) published a preliminary report on physiotherapy education in Europe that was based on their findings following a study carried out in 1995/96 on behalf of the European Network of Physiotherapy in Higher Education (Enphe). They provided information on four main areas: general information, curriculum and aims, curriculum process and information on research. Their study considered the responses to a questionnaire that was sent to 415 schools of physiotherapy across 17 European countries. The return rate was 30.6%. Though the report was published in 2001 and therefore two years after the signing of the Bologna Declaration the findings pertain to the study conducted in 1995/96 and therefore four years prior to the start of the Bologna Process.

The duration of physiotherapy education differed between a three-year programme and a four-year programme depending on the school. The report did not provide information as to how many schools followed one or the other. In Belgium, Finland, Italy and the United Kingdom it was reported that both programmes were offered. A feature that emerged in the assessment of these programmes indicated that those



programmes which took three years were conducted under the responsibility of statutory bodies and the government. Those programmes whose duration was of four years were conducted under the auspices of the universities. Differences were described depending on who established the curriculum.

Important differences were also reported in the recognition of the entry-level qualification that was the minimum level recognised as sufficient to practice physiotherapy. 37.7% (n = 46) of the respondents indicated that there were additional requirements necessary for their students to be recognised/authorised to practice as a physiotherapist. The findings are ambiguous however as it was not clear whether the additional requirement was for the graduates to apply for recognition/authorisation to practice (the registration/application process itself); or whether additional qualifications were required for the registration process to be completed.

The European Credit Transfer System that preceded the current European Credit Transfer and Accumulation System was reportedly adopted only in Belgium and Ireland and sporadically in Finland, Spain, Sweden and the Netherlands. 50% of the respondents (n=62) were not aware that such a system existed as a credit system.

Other differences that were reported related to the organisation of the programmes' calendar and if they were divided into terms or semesters including the number of weeks for each academic year. The number of hours that constituted a week was not reported.

A great difference was observed in the total absolute number of hours that were reportedly allocated for physiotherapy education and that included both clinical training and contact hours. These hours, reproduced in Table 2.4, did not necessarily portray the proper picture as methodological errors in the definitions of terms were reported that could have led to misunderstandings.

Whilst reserving the need to interpret these findings with caution, they may serve as a baseline for comparisons to be drawn with. A detailed assessment revealed that there was a greater difference in the hours reported for physiotherapy education in Switzerland, Germany and Finland when compared to the rest of Europe. Another conspicuous difference was observed in the number of hours allocated for the three-year programmes compared to the four-year programmes. The longer programmes reported considerably less total hours in Belgium, France, UK, Greece, Ireland and

Norway. Once again, the interpretation of these results must bear the consequences of the reported errors. This could also signal a shift in the nature of the responsibilities towards the recognition of the programmes as discussed earlier – the shorter programmes relying on government and statutory bodies and the longer programmes on universities.

Staes, Stappaerts and Myles (2001) reported that additional information leading to the evaluation of examination and teaching methods, quality of staff and quality assurance programmes was inconclusive due to the poor quality of the answers and hence will not be discussed further.

TABLE 2.4: THE NUMBER OF CONTACT HOURS AND CLINICAL EXPERIENCE HOURS REPORTED IN THE 'ENPHE REPORT ON PHYSIOTHERAPY EDUCATION IN EUROPE IN 1996' LATER PUBLISHED IN 2001 BY STAES, STAPPAAERTS AND MYLES

	Programme Duration	Total Contact Hours		Total Hours of clinical studies		Total Absolute number of hours	
		3 years	4 years	3 years	4 years	3 years	4 years
Country	Austria	3036	-	0	-	3036	-
	Belgium	3712	2265	2000	1330	5712	3595
	Denmark	3600	-	1043	-	4643	-
	France	3636	2040	1770	1735	5406	3775
	Germany	7636	-	2765	-	10401	-
	Italy	2122	-	2200	-	4322	-
	Portugal	2640	-	1085	-	3725	-
	Spain	2724	-	1620	-	4344	-
	Sweden	3400	-	1380	-	4780	-
	United Kingdom	6000	2190	1736	1548	7736	3738
Country	Finland	-	6400	-	2450	-	8850
	Greece	-	3200	-	747	-	3947
	Iceland	-	3320	-	1300	-	4620
	Ireland	-	1872	-	1000	-	2872
	Norway	-	2240	-	2655	-	4895
	Switzerland	-	7038	-	5040	-	12078
	The Netherlands	-	4452	-	2160	-	6612

One further publication which specifically reported on the European dimension of physiotherapy education was identified. It is a report published in 2005 by the European Region of the World Confederation for Physiotherapy (ER-WCPT) that gave a summary of physiotherapy education within the national education systems of 32 countries. A copy of this report is presented as the Appendix 2 of this thesis. The information was provided by professional organisations that were members of ER-WCPT. This report highlighted the status of physiotherapy education within the respective national education systems along with the number of physiotherapy programmes that were officially recognised in each country and the duration of undergraduate studies in physiotherapy. A description of the different status levels was provided and is reproduced in box 2.2. In 27 countries the status of physiotherapy education was at the level of higher education. In five countries it was considered equal to a higher education but not officially recognised. In three countries physiotherapy was taught at a secondary-educational level.

The status of physiotherapy education within the National educational systems across Europe was described under three levels:

1. **Secondary Education / professional education** – if the entry level is lower than the normal entry level for higher education, in the country.
2. **Parallel – post-secondary / Parallel to Higher education** - if the entry level is the same as for Higher Education, but the physiotherapy education is not officially considered as part of higher education
3. **Higher Education** - if physiotherapy education is officially considered as part of higher education (University or other kind of Higher Education)

(Source: ER-WCPT publication: Summary of physiotherapy education within the National Education System – 2005)

BOX 2.2:DIFFERENT STATUS' OF PHYSIOTHERAPY EDUCATION IN EUROPE AS DESCRIBED BY ER-WCPT

Wasner (2006) completed a PhD thesis which sought to identify and compare quality assurance systems and quality methods of physiotherapy education programmes in six European countries (Denmark, Germany, Finland, Great Britain, the Netherlands and Austria) and also to give advice towards quality management for the physiotherapy programmes in Europe. The publication of the PhD thesis was in German however it had an English abstract. Among the concluding remarks it was noted that the European professional standards have not been considered in their entirety and recommendations to improve the quality management in physiotherapy education were proposed through the coordinated work between the single education institution, the professional body and the accreditation agencies or the governmental body.

#### **2.4.2 Trends for physiotherapy in higher education**

Historically, physiotherapy education aimed to serve the needs of a paramedic vocation that was established within a biomedical paradigm (Higgs et al. 1999). In many countries physiotherapy has nowadays achieved the status of an autonomous profession. Moreover physiotherapy education has undergone a number of changes that have seen the majority of its programmes being transferred from colleges and hospitals to universities (Häger-Ross and Sundelin 2007, Bithell 2007). The implication is that whilst physiotherapy was previously predominantly a vocational profession and therefore clinically-focused in its training programme, today it assumes a framework that is built in the applied and clinical sciences (Hunt et al. 1998). In other words, in many countries physiotherapy has seen a transition in its educational status move to that of a higher educational level. As a result, physiotherapists are now expected by the general community to possess not only discipline-specific skills, but also skills common to all university graduates, such as thinking, communication, learning techniques and problem-solving ability (*ibid.*).

External and internal challenges to the practice of physiotherapy, such as changes taking place in the healthcare contexts, the development of physiotherapy as a profession and the future directions for physiotherapy education are determined by how well physiotherapy education acts in the face of these challenges (Higgs et al.



1999). It can be argued that these challenges have always existed. They have been contextualised within the influence of physiotherapy as a profession in the changing contexts of healthcare and its delivery (Richardson 1999). In more recent years, physiotherapy education would appear to still be facing certain direct challenges as a result of major influences, such as the influence of the Bologna Process and its varied demands. Along with the health sector, education is a context where change is constant and where the need to manage change creatively and efficiently is important to keep abreast with developments. The changing expectations of physiotherapy education appear to result as a consequence of identified constraints, such as growing financial difficulties and workforce demands (Higgs et al. 1999). The need for the evaluation of current educational contents and processes is warranted.

The hierarchical level at which physiotherapy is placed in higher education across Europe is also not so clear. In some countries physiotherapy is studied as an academic degree within the University setting, in others within the University of Applied Sciences and in some others it is still taught outside the University. Whether or not all of the programmes result in the conferment of an academic title is also still not clearly understood as even amongst those countries where physiotherapy is taught, for example, within a University of Applied Sciences, some confer an academic degree/title and others a professional degree/title that is not recognised as an academic one. In the Netherlands, for example, post-graduate education at Master and Doctoral degree levels are not always automatic; or not possible outside the University. Physiotherapy education takes place within the echelons of the University of Applied Sciences with the conferment of a professional title and hence, separate from the University. As a consequence physiotherapists require alternative routes in order to obtain further and higher qualifications (Kiers 2012).

Professional education should be aimed at enabling graduates to provide their contribution to the community through the services that they would render. In this respect the Bologna Process determined that the Bachelor degree (or 1<sup>st</sup> cycle qualification) should lead to a minimum qualification entry-level to any profession. The revised *Education Policy Statement* of the ER-WCPT (2010) asserts this proposition in the policy recommendations to its member organisations. Yet, on the international scene, there is an on-going debate, led in my opinion by the United States (American Physical Therapy Association Vision Statement 2020) to further raise the entry-level



into the profession of physiotherapy. Already in one country in Europe that would be Belgium, it appears that the Master level (or 2<sup>nd</sup> cycle) exit grants access to the physiotherapy profession although how and why this is the case is not clear. In 1995 the federal parliament of Belgium approved that the law of *Diegenant-Mahoux*<sup>15</sup> be amended so that the education for physiotherapy would last four years as of the 1st of September 1997. Thus, the Belgian Royal Decree on the regulation of health professions indicated that the professional title of Physiotherapist is achieved following the completion of four years of higher education. In Belgium, the current physiotherapy programmes only offer a Bachelor + Master programme without the possibility of exiting at Bachelor level. In the Flemish-speaking part of Belgium (Flanders and Brussels) the Master of Science in rehabilitation sciences and physiotherapy is the entry level for the profession (5 years). In the French-Speaking part of Belgium (Wallonia and Brussels) the entry level to the profession is the Master level (4 years: Bachelor 3 years + Master 1 year) (Craps 2012).

Within the context of higher education and physiotherapy practice the implications and expectations are wide ranging and have not been properly contextualised and explored.

### **2.4.3 The role of European based organisations in physiotherapy education**

The role that European based organisations play in the discussion surrounding physiotherapy education should not be underestimated. Non-profit (also called not-for-profit, voluntary, or community) organisations form part of what is commonly termed the *third sector* to be distinguished from the public sector and private sector. Third sector involvement differs from country to country and also continent to continent; it is shaped by special national and regional traditions including the academic sphere, cultural and political dimensions. In a way, it may be postulated that the third sector is '*value-driven*' (Evers and Laville 2004 p.194). The influence by third sector organisations on policy outcomes at a European level is heavily circumscribed (Dur and De Bièvre 2007) however they have an important role to serve as

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<sup>15</sup> The Belgian law enacted on 6 April 1955 (Diegenant-Mahoux), published on 16 June 1955 took the profession of kinesiotherapy (physiotherapy) out of the paramedical professions and created a new chapter, kinesiotherapy being a medical profession with paramedical characteristics (Craps 2012).

observatories and advocacy groups informing and guiding their members in the process. Well-organised and successful organisations present an opportunity to search for answers or seek directions within the remits of their operational expertise. On a European platform there are two such organisations for physiotherapy, the European Region – WCPT and the European Network of Physiotherapists in Higher Education.

#### **2.4.3.1 European Region – WCPT**

The European Region of the World Confederation for Physiotherapy (ER-WCPT) was established in 1998 to give the physiotherapy profession across Europe a strong single representative organisation and became the voice of physiotherapy to the European and European Union authorities. The ER-WCPT is a European non-profit, non-governmental, organisation of professional associations for physiotherapists from countries that are simultaneously members of the World Confederation for Physical Therapy. In 2012, 37 countries formed part of the ER-WCPT. The activities of the ER-WCPT are divided into three groups: education, professional issues and the European Union matters. The objectives of the ER-WCPT, as stated in its Charter, are, among others, to promote the development of physiotherapy, the reciprocity of the recognition of physiotherapy qualifications, and to improve the quality of physiotherapy education and practice in Europe. Education, both at basic and post basic levels, plays a fundamental role to guarantee the professional identity, and is an important tool to promote free movement and the right of establishment of physiotherapists in Europe. Within this framework the ER-WCPT established the Education Matters Working Group in 1999. Among the activities recommended for this group was the continuing update of the '*Policy Statement on Physiotherapy Education*' due to the evolvement of the Bologna Process (ERWCPT 2008). Through the activities of the working group, the ER-WCPT functions as an observatory of what is happening around Europe with regards to physiotherapy education. It gathers information from member organisations and publishes reports that serve to provide a general picture of physiotherapy across the continent. In this sense the ER-WCPT may be identified as an organised group of reputable member organisations who hold

information that is pertinent to understanding the evolution of physiotherapy education in Europe.

#### **2.4.3.2 The European Network of Physiotherapy in Higher Education**

The European Network of Physiotherapy in Higher Education (Enphe) was founded in 1995 within the framework of the European Community. It is a non-political, non-profit organisation governed by a charter. Enphe aims to bring European physiotherapy educational institutions together and enhances collaboration between them. Enphe and the ER-WCPT are different. Whilst the ER-WCPT brings national professional associations for physiotherapy together to discuss all the aspects of the profession, Enphe is solely concerned with the schools of physiotherapy. In 2012, Enphe reported to have 189 individual institutions from 28 European countries gathered within the network. The actual number of schools of physiotherapy in Europe is not known as this information depends on registration and regulation requirements that differ across different countries and at times also across different regions in the same country. Membership within the network is at the level of the institution; it comes against a fee and the general engagement is on a voluntary basis. Members (the institutions) elect an Executive Board to administer the Enphe affairs. They also elect a Coordinating Committee consisting of a country representative (called the coordinator) from each of the countries represented. In this sense Enphe may be identified as a group of engaged institutions and based on a country by country perspective, encompasses identified persons who speak on behalf of the other members from their country.

This chapter has contextualised the literature pertaining to the Bologna Process and physiotherapy education. The literature search strategy has been presented. The Bologna Process was visited through a review of its origin, substance, influence, awareness and differential impact. It was not the intention to explain the objectives of the Bologna Process. Though facing critique, the Bologna Process has been presented as a driving force for change and reform in higher education. The extent and impact of the higher education curricular reform across Europe was reviewed following a purposefully commissioned report by the European Commission that assessed the study areas of medicine, law, teacher training, engineering and history – classically identified as the traditional areas of higher education study. Reforms in physiotherapy training and education appear to be ongoing and yet evidence to this effect is limited. This chapter thus leads on to a presentation of the rationale and the aims and objectives for the study.

# Chapter 3

## *The Rationale & Objectives*

This chapter sets out the rationale and the aims & objectives for the project. The rationale was drawn from gaps in the literature that this study eventually addressed. The opening part of this chapter discusses the problem statement and the implications of this research study, leading to the research questions. The intention is to convey why this study has been important for the researcher and why it was carried out at that point in time.



### 3.1 Problem Statement

The research problem addressed in this thesis is a contention that the influence of the Bologna Process on physiotherapy education across Europe is poorly understood by those with the responsibility for implementing it. The Bologna Process is possibly the single most important reform of higher education to take place in the last thirty years (Davies 2008) with many European physiotherapy educational institutions rethinking and restructuring their curricula along the lines of the Bologna Declaration (Ven and Vyt 2007). The Bologna Process has been in the focus of the European Region of the World Confederation for Physiotherapy (ER-WCPT) and the European Network of Physiotherapy in Higher Education (Enphe) and yet to date, very limited research has been carried out and published that evaluates physiotherapy education with respect to the adoption of the Bologna objectives across Europe. Most recent information is limited to the publication of reports by the ER-WCPT amongst its members.

The differing hierarchical levels of physiotherapy in higher education across Europe are not clear. Discussions amongst participants at meetings of the ER-WCPT and Enphe would appear to iterate this; and that any differences that exist between respective national systems may be addressed in the light of the Bologna Process. The Bologna Process itself has served to encourage and develop discussions regarding its consequences for physiotherapy in higher education.

Higher education is in continual transformation (Inayatullah and Gidley 2000) experiencing the challenges of globalisation and shifting demographics (BFUG report 2009). As a practising physiotherapist, educator and a member of several professional networks across Europe, I have observed that since 1999 the Bologna Process has played an influential role in the reorganisation of the governance of physiotherapy in higher education. It may be surmised that the political context of the Bologna Process, noted from the signing of the Bologna Declaration and the subsequent *communiqués*, has had, and is still having, a direct effect on the organisational governance of higher education institutions. However, the influence of the Bologna Process on organisational change within higher education may not be immediately recognised at the grass root level since, in itself, the Bologna Process has been led by ministerial agencies. This top down approach means that heads of departments in the higher

education institutions are being tasked to implement changes in the administration of the courses that they lead in order to comply with national obligations for conformity across institutions. In turn, on a national level, such institutions have been called upon to conform to a European agenda that allows for better comparability of higher education across Europe. Even though the Bologna Process is not embedded in a legally binding framework, the phenomenon of globalisation has highlighted the challenges being faced by the European Higher Education Area such as global competitiveness, international cooperation and mobility (BFUG report 2009). The current climate of economic instability adds to this and may suggest that the traditional models of organisational governance for physiotherapy in higher education need to be reconsidered in the light of these changes. A better understanding of the current picture of organisational governance for physiotherapy in higher education may inform us on the process of any reforms as a result of the Bologna Process and the implications, with a view to assess the strategies for the future.

### **3.2 Rationale**

The rationale for this study emerges from the findings from the literature that the Bologna Process reforms in physiotherapy training and education appear to be ongoing; however evidence of their extent and impact is limited. As a researcher I was interested in investigating in depth the Bologna Process reforms on the organisational governance of physiotherapy education across Europe, with a focus on both the current implementation of the Bologna Process objectives and also on the driving forces behind any such implementation. It was envisaged that this investigation may provide information to support the development of physiotherapy programmes across Europe. Research that investigates the activities and attitudes prevalent in the physiotherapy profession (practice, education and/or research) has been advocated as being able to inform education programmes and to reveal the physiotherapy paradigm (Richardson 1992).

It is argued here that an exploration of the current governance of physiotherapy education was necessary for policy-makers, heads of departments, faculty members and practitioners to take stock of recent influences on educational processes. An explanation of the driving forces that governed physiotherapy education in Europe,

taking the objectives of the Bologna Process as a platform for discussion, and considering the challenges that higher education faces in the decade to come, will enhance the knowledge of practices within physiotherapy education in Europe and facilitate its evaluation. The final reflection is towards the physiotherapy educators, so that they are better informed about the influences of the Bologna Process and for them to reflect upon these in the course of educating the physiotherapy workforce of tomorrow. The timing of this study was appropriate because it came at the end of the Bologna Process decade (1999 - 2009) and at the inception of the European Higher Education Area making it relevant, important and necessary.

### **3.3 The Study Questions**

The study questions are derived from a willingness to learn about the influence of the Bologna Process on the governance of physiotherapy in higher education. As a precondition it was necessary to describe what was happening, both in terms of the actual engagement with the Bologna Process objectives and also what were the different European perspectives in the implementation of the Bologna Process. Therefore the main study question was:

*How has the Bologna Process influenced the governance of physiotherapy education across Europe?*

The secondary questions for this investigation were:

*What is the level of engagement with the Bologna objectives within physiotherapy in higher education?*

*How are the different European perspectives understood with respect to the adoption of the Bologna Process?*



### 3.4 Aims and Objectives

My research interest was to understand the influences of the Bologna Process on physiotherapy education. This had to start with an investigation of the extent of the adoption of the Bologna Process objectives to be followed by an interpretation of its impact on educational governance within physiotherapy. The aim was to draw out the influence that the Bologna Process may have had on physiotherapy in higher education across Europe. It was decided that an appropriate research methodology to address this aim would be case study (Tesch 1990).

The objectives of this study, arising from the aim above were:

1. To determine the extent of the engagement with the objectives of the Bologna Process within physiotherapy education programmes;
2. To elicit the different perspectives held by leaders in physiotherapy education across Europe in the light of the objectives of the Bologna Process;
3. To understand the nature of any influence of the Bologna Process and to describe the differences between different countries, and
4. To understand any social factors that may have determined and shaped such influences.

As the Bologna Process is a contemporary event that has been influencing a particular aspect in the European higher education agenda, ultimately, this research sought to understand the experiences of key players in physiotherapy education across Europe in the context of the Bologna Process.

# Chapter 4

## *The Research Methodology*

Chapter 4 of this thesis presents the methodological approach adopted in the study design. It takes the journey another step forward from the presentation of the research questions and constructs an argument for the choice of Case Study following the literature by Yin (2009) as a research methodology.

This chapter will lead to Chapter 5 of this thesis that will describe the research methods, data collection procedures and analysis process.

## 4.1 Introduction to the Methodology

The aim of this study was to draw out the influence that the Bologna Process may have had on physiotherapy in higher education across Europe. It was considered that a case study methodology (CSM) was appropriate to meet this aim. The objectives of the study required the collection and generation of different types of data in order to meet them. This called for the employment of multiple methods for generating different types of data (Creswell 2009). A design employing survey and interviews was therefore utilised within the CSM adopted.

Case Study Methodology was considered appropriate because it is relevant for contributions towards '*knowledge of organisational, political and related phenomena*' (Yin 2009 p.4) allowing the retention of meaningful characteristics of real-life events. The Bologna Process is a contemporary event that aims to influence the manner in which higher educational processes are organised. The adoption of the case study strategy was appropriate because it sought to answer the 'how' question, focusing on contemporary events without the need (or the possibility) of controlling variables - such as participant behaviour, as might be seen in more positivistic approaches. The 'case' in this study was defined as 'the influence of the Bologna Process on physiotherapy in higher education'.

## 4.2 Epistemological underpinnings

The CSM adopted in this study is based on an interpretivist perspective and any claims made for this research do not focus on a right or wrong answer as in a true or false situation (critical rationalism); or provide evidence that this was the right thing to do (empiricism); or present an exclusive link between the cause and effect (positivism) (Crotty 2003) but are presented as a constructed reality drawn from the multiple perspectives of those involved. To this end an evaluative aspect was also emerging as in addition to gaining insight to enable reflection and assist in the identification of future change (Del Tufo and Gaster 2002), the study planned to deal with a complex issue (Clarke 2005). The choice for an approach to understand the views of the stakeholders through a democratic process, by involving them, reflected

an epistemological position that was constructivist as opposed to positivist (Guba and Lincoln 1989).

The qualitative interviews employed in this study rested on the epistemological approach of constructionism which assumes that knowledge is generated by those processes in which people negotiate the meanings of situations (Crotty 2003) and thereby develop understanding. This perspective was demonstrated in accepting that multiple realities of the case across Europe may have existed (Neill 2006).

In order to meet the objectives of the study, the overall qualitative approach was, however, complemented by a quantitative element through the use of self-completion questionnaires. As opposed to the narrative data generated by the interviews, the aim of the survey data collection method was to collect quantitative data to be analysed statistically and presented as descriptive statistical findings. This knowledge would provide an objective reflection (Heylighen 1993) drawn from a more positivist epistemological position, of the extent of the implementation of the Bologna Process objectives within physiotherapy programmes across Europe, enriching the overall constructionist epistemology.

## **4.3 Case Study Methodology**

### **4.3.1 Case Study Approach**

Numerous authors have reported and written on case study as a research methodology in its own right (Lijphart 1971, Ragin and Becker 1992, Stake 2005, Flyvbjerg 2006, Simons 2009, Yin 2009, Flyvbjerg 2011, Thomas 2011). Whilst different definitions for case study may emerge from different epistemological stances such as interpretivist, neopositivist or illustrative (Thomas 2011), it would appear that it is not the choice of method that defines case study but analytical eclecticism. In this study the research questions emerging from different epistemological underpinnings and calling upon multiple data collection methods fits well within a case study approach. The 'case' of the influence of the Bologna Process is bound by the examination of these influences on the organisational governance of physiotherapy education across Europe and therefore presents both a case and a context (Yin 2009). Many definitions for case study have led to misunderstandings of the methodology, leading to underrating the



value that well-constructed case studies may bring to the academic world (Flyvbjerg 2011).

Defining the case has always been problematic (Ragin and Becker 1992). Traditionally the case in a case study referred to an individual whose particular situation was the scope of the investigation (Platt 1992), for example a clinical patient or exemplary student (Yin 2009). Examples of recent traditional case studies in physiotherapy have involved investigations into a small group of subjects as a series of single-case studies (Coote et al. 2008) and as a multiple-case study (Zetterberg et al. 2007). In both these studies the case was an individual. Non-classical case studies have also been reported in physiotherapy such as the inquiry into the learning process experienced by physiotherapists on completion of a Master of Science course (Petty, Scholes and Ellis 2011). The design in this latter investigation was a single-case design; the case being the learning process experienced by the physiotherapists.

Yin's approach to case study fits the aims of this study. Yin takes what appears to be a rather positivistic approach compared to Stake (2005) or Thomas (2011) that could be seen as not resonating with the constructionist approach of the present study.

However, this was not seen as problematic as Yin, despite utilising what appear to be rather positivistic concepts in the descriptions of his approach, tends to employ qualitative methods and ethos, suggesting that *'case study is preferred in examining contemporary events when the relevant behaviours cannot be manipulated'* (Yin 2009 p.11). His methodological descriptions of a logical and rigorous approach were felt to be helpful in this study, conducted by a neophyte researcher.

Yin's definition of a case study (2009 p.18) supports the design of this study in that he refers to case study as *'an empirical inquiry that investigates a contemporary phenomenon in depth within its real-life context especially when the boundaries between the phenomenon and context are not clearly evident.'* The boundaries between the organisational governance of physiotherapy programmes in higher education (the context), and the implementation of the Bologna Process (the phenomenon) appeared blurred because of a number of factors: it was not clear to what extent the Bologna Process had influenced physiotherapy education; if indeed there had been any influence; if the described experiences were due to factors other than the Bologna Process or if the influences seen across Europe had emerged

concurrently for the same or for different reasons. This unravels the scope of the study that aimed to interpret the influence of the Bologna Process.

Case study as a methodology has been widely criticised (Stake 2005, Berg 2009) due to its apparent lesser degree of rigour when compared to other forms of research (Flyvbjerg 2006). However, it is argued in the context of this work, that case study research offered the potential for a meaningful and applicable contribution to knowledge by following a procedure that was systematic and rigorous. Another concern is directed towards the perception of there being little basis for scientific generalisation in case study research. Yin's (2009) counter-arguments on this matter focus around the goal of case studies '*to expand and generalise theories and not to enumerate frequencies*' (p.15) and that as a consequence findings from a case study can be generalisable, but to propositions rather than populations. Flyvberg (2009, 2011) also addresses the issue of poor generalisability for case studies and explains that defining the boundaries of the case helps to limit the findings to the context in which they are studied. The word 'generalisability' can carry strong connotations to more positivist research approaches, and since this study has been set within a constructionist paradigm, the term 'transferability' may be more appropriate.

#### **4.3.2 Case Study Design**

This study was planned as a Type 1 single case design (Yin 2009). This refers to a representative or typical case study design where the objective is to assess, describe and understand (in this study the influence of the Bologna Process); and from this to identify what may be assumed to be informative from the perceived understandings of the participants (Yin 2009).

A central factor that distinguishes between single or multiple-case design is whether or not there is a comparative element to the study (Stake 2005). This distinction is important to avoid confusion about the case study (Thomas 2011). Yin (2009) considers that both designs follow the same methodological process, with the distinction between them taking place at the level of research design. In particular he argues that a multiple-case design is more appropriate where the intention is '*to follow a replication design*' (p.53), similar to the multiple experiments carried out in empirical



based research, although this is not to be confused with the repeated measures of the same experiment. Thomas (2011 p.517) reports that single-case studies '*contain no element of comparison*' and suggests that the features of the subject have to be bound by time. In suggesting this, he acknowledged that some form of boundary was necessary even though he disagrees with Yin's stance that typicality is derived by framing the case.

The ultimate goal of this study was to determine whether the Bologna Process had influenced physiotherapy in higher education across Europe, and if so to what extent. It was not to compare any influences. The key focus was not on the nature of the influences in one particular country, but rather on the nature of the differences between the countries and what this might inform us about the dynamics that were observed. This study, therefore, followed Yin's Type 1 single-case holistic design.

### **4.3.3 The Research Design**

Having decided on case study as the approach and a Type 1 single-case as the design of this case study, the following discussion provides a rationale for the research design. It looks back and reviews the choice of the research questions in the light of CSM. It offers a justification for the selection of participants and the strategy chosen to investigate the case. According to Yin (2009) the components of a research design for case study are especially important as they deal with the logical problem (a reasoned assessment into the understanding of any influences of the Bologna Process on physiotherapy in higher education). These components include the study's questions, any propositions, the unit of analysis, the logic linking the data to the propositions and finally the criteria used to interpret the findings. These components are illustrated in Figure 4.1.

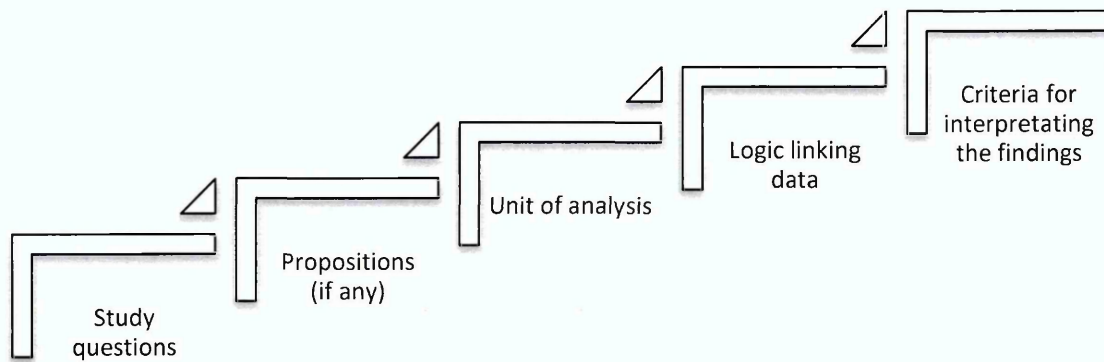


FIGURE 4.1: THE FIVE COMPONENTS OF THE RESEARCH DESIGN FOR CASE STUDY OUTLINED BY YIN (2009)

### *Study Questions*

Yin (2009) suggests that the nature of the questions will direct the research as being either exploratory - with the goal of developing a hypotheses or proposition for further inquiry; or explanatory and hence dealing with operational links rather than frequencies or incidence. In his description of the different forms of questions those starting with 'what' (and similarly 'who' and 'where') are exploratory and as a consequence follow a method based on exploratory means such as survey; those starting with 'how' or 'why' are explanatory and more likely to rely on qualitative forms of data collection. The use of CSM then allows for the employment of multiple and different methods in the data collection process.

In order to understand how the Bologna Process had influenced the governance of physiotherapy in higher education across Europe it was necessary to first explore if universities were engaged with the objectives of the Bologna Process at the level of physiotherapy departments, and by that it was necessary to know if they were or were not; and if they were, to what degree. These questions were addressed via quantitative means through a survey. In order to address the more explanatory focussed study questions insofar as to understand the nature of any influences and describe the differences between different countries it was necessary to use more the qualitative means of interviews.

At a methodological level, the study question called for an explanatory approach but the developing questions that included both 'what' and 'how' perspectives called for a multiple method approach of exploratory surveys and explanatory interviews.

Hence the main study question was:

1. How has the Bologna Process influenced the governance of physiotherapy education across Europe?

The secondary questions for this investigation were:

2. What is the level of engagement with the Bologna objectives within physiotherapy in higher education?
3. How are the different European perspectives understood with respect to the adoption of the Bologna Process?

Guided by the context of this study, that is the organisational governance of physiotherapy programmes in higher education, issues for transferability of the findings had to address the different perspectives just as the study questions had to direct the area of inquiry towards something meaningful, and hence representative or typical (Yin 2009). Therefore any information that was to be sought had to be context-dependent and hence justified for the research. This had implications on the selection of the participants who were required to have the knowledge on the organisational governance of physiotherapy in higher education; and this information had to also represent a European-wide perspective. This study was dependent on context-specific knowledge to satisfy the requirement of transferability and it was reflected by the investigation of how the participants engaged with the Bologna Process in the course of their work; and hence the aim was also to identify their experiences. As a consequence, the participants chosen to investigate the case had to be purposefully selected rather than randomly selected. It was necessary to purposefully choose from where to learn about these experiences guided by the intention of obtaining the most valuable information.

### *Study Propositions*

Propositions within case study research are a form of hypothesised assumptions about the case that can be drawn from the researcher's experience, the literature or extant theories. Yin (p.28) contends that '*a proposition directs attention to something that could be examined within the scope of the study*' and could point to what one could study. However, he also states that studies may have a legitimate reason for not having any propositions, particularly when the case itself is the subject of the investigation. Propositions are often not stated in exploratory case studies due to lack of previous knowledge on the subject. Since the nature of this study was to explore the influences of the Bologna Process and little is known to date, no propositions were put forward.

### *Unit of analysis*

The unit of analysis is understood to be the major 'thing' to be analysed in a study (Trochim 2006). Establishing the unit of analysis is related to the fundamental problem of defining what the case is – the definition of the unit of analysis in fact is the same as the 'case'. In this study, therefore, the unit of analysis was the influence of the Bologna Process and is distinguished from the context of the case (Yin 2009).

For Yin, a desirable aspect in clarifying the unit of analysis is to define a specific time boundary for the beginning and the end of the case. In this study, the time boundary corresponded to a defined period of time (snapshot) between 1999 and 2011. This period was chosen as it specified the time between the start of the Bologna Process and the time when the data of this study were collected. Hence the selection of the unit of analysis met the criteria discussed by Yin for binding and so specifically defining the case and unit of analysis (2009).

### *Linking the data to propositions*

This step in the design process served to create a more solid foundation for the later analysis, which as Yin (2009 p.34) argued would '*combine the case study data as a direct reflection of the study proposition.*' It has already been stated that for this study there were no propositions. It nonetheless raised the question of the type of data to be collected and how this fulfilled the purpose of the study. These decisions would



ultimately inform the choice of the analytic techniques. The objective of this study was to understand the influence of the Bologna Process on physiotherapy in higher education. Therefore it was important to collect data that captured the actual and current extent of its implementation and also the experiences of those involved. In order to address these I chose to follow two separate routes. The first route was a quantitative approach that sought to collect mass data across European academic institutions related to the implementation of the Bologna Process. The second route was a qualitative approach that sought to record personal accounts of the experiences of implementing the Bologna Process objectives.

### *Criteria for interpreting the findings*

The last step in the research design was to develop the criteria for interpreting the findings. According to Yin, in the absence of the need to interpret findings in a statistical manner, alternative strategies are needed to explain them. The strategy adopted to interpret the findings needed to demonstrate that the evidence would be treated fairly, produce compelling analytical conclusions and, as far as possible, rule out alternative or rival explanations (Yin 2009). It was important to identify these early on because it allowed them to be addressed in the data collection phase. Rival explanations offered alternative reasons for any possible observations. In this study the rival explanations were the direct alternatives (both in practice and policy) that could account for the observed outcomes rather than the Bologna Process; the commingled alternative (again both practice or policy) that could have resulted by the contributions of both the Bologna Process and other interventions; and implementation alternatives which could account for influences arising from the substantive intervention and not the implementation process itself. A fourth aspect was the researcher perspective on the process. This final step in the research design required constant monitoring and self-awareness as it had implications with respect to the trustworthiness of the findings.

Insofar that the research design for this study could be developed and explained along with Yin's components of case study research, it was concluded that the choice of case study as a methodology was appropriate for the conduct this investigation.



## 4.4 Multiple methods: combining quantitative and qualitative approaches

It has already been discussed in the approach to the research design that the emergent purpose of this study's design had implications on the choice of the methods. It is argued that a strength of case study research is found in the evidence that relies on multiple sources of data (Yin 2009; Sharp et al. 2011) and that when combined properly provide a better understanding of the problem (Creswell and Clark 2007). According to Miles and Huberman (1994 p.41) *'the question, then, is not whether [different] sorts of data and associated methods can be linked during study design, but when it should be done, how it will be done, and for what purposes.'* Rossman and Wilson (1985) suggested that from the pragmatist position using more than one method served to corroborate (provide convergence in findings), elaborate (provide richness and detail) or initiate (offer new interpretations) findings in the analysis stage.

All three had relevance to the adoption of a multiple method approach in the data collection phase of this study. However, this approach did not imply a methodological stance of mixed-methodology, only that the data collection methods were different. An approach that included merging the data would have implied mixing methodologies (Bazeley 2009) and this was not the intention of this study. This decision was purposeful in order to meet the intention of connecting the information within a multiple data collection approach (Creswell and Clark 2007) that served for each data set to build on the other (figure 4.2).

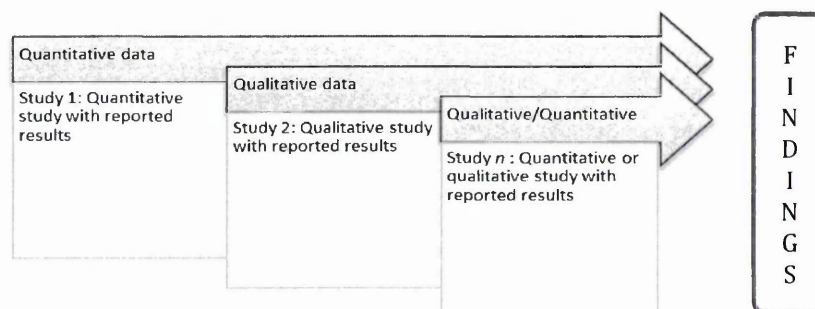


FIGURE 4.2: DIAGRAM THAT ILLUSTRATES HOW THE USE OF DIFFERENT DATA SOURCES MAY LEAD TO THE FINDINGS IN THIS CASE STUDY ON THE INFLUENCE OF THE BOLOGNA PROCESS ON THE GOVERNANCE OF PHYSIOTHERAPY EDUCATION ACROSS EUROPE

## 4.5 The Analytical Process

The last consideration in this methodological discussion provides a justification for the choice of analytical techniques. The numerical data from the survey findings was analysed using integrated SPSS software within the web based survey programme SurveyMonkey® and reported as descriptive statistics.

The interview transcripts were reviewed analytically and reported in a narrative manner by following the Framework Approach. In qualitative research, analytical processes commonly start during the data collection itself as this shapes on-going data collection (Eisenhardt 1989; Corbin and Strauss 1990; Pope, Ziebland and Mays 2000; Denzin and Lincoln 2007). The strategy had to consider an analysis that uncovered and made sense of the findings. It was relevant therefore to consider breaking down the data into smaller analytical units, or themes with the purpose of providing new or common insights (Corbin and Strauss 1990). These themes were derived by adopting an inductive process that was examined and grounded in the data. It was decided to adopt the Framework Approach as described by Ritchie and Spencer (2002) to analyse the narrative datasets generated through the interviews. This approach facilitated the development of a thematic framework by building upon a set of *a priori* themes, identified from the Bologna Process objectives that enabled the possibility of continual revision to the end of the analytic process in a linear fashion. The *a priori* themes, grounded in the objectives of the Bologna Process, served as a springboard from which the emerging themes were identified in the first stage, also called familiarisation of the framework approach (see figure 4.3). As such, although the overall approach was inductive, it began deductively meaning that the analytic process was explicit and strongly informed by the *a priori* reasoning (Pope, Ziebland and Mays 2000). A benefit of the Framework Approach is that it provides systematic and visible stages to the analysis process (Lacey and Luff 2009). Furthermore it was developed specifically for applied or policy relevant qualitative research that is also linked with quantitative findings (Pope, Ziebland and Mays 2000). This indicated that the choice of framework analysis for the qualitative part of the analytical process was relevant for this study. The stages of the framework analysis approach followed in this study and the development of the thematic framework are depicted in Figure 4.3.

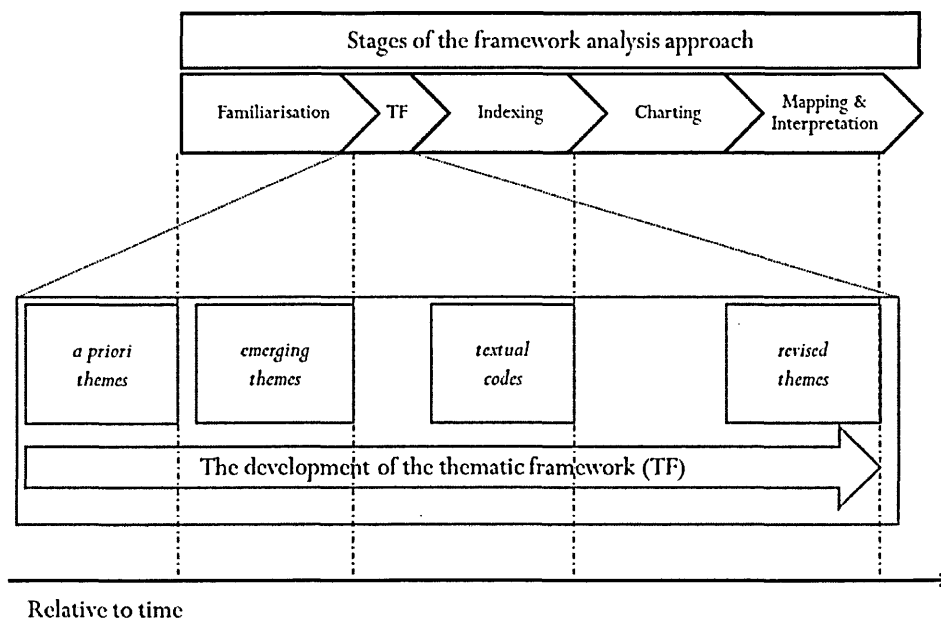


FIGURE 4.3: THE FIVE STAGES OF THE FRAMEWORK ANALYSIS APPROACH AND THE DEVELOPMENT OF THE THEMATIC FRAMEWORK

## Conclusion

This chapter has provided the justification for the choice of Case Study Methodology as appropriate for this research project. The case study approach, the case study design and the research design have been explained and discussed. A multiple method data collection process has been argued for and the choice for the process of analysis has been articulated. This leads on to the data collection procedures and protocols of the research that is explained in the next chapter.

# Chapter 5

## *The Research Methods and Procedures*

This fifth chapter of the thesis covers the research methods and procedures. It includes, in the first section, an explanation on the research methods and therefore the rationale for participant selection, the tools employed and the procedures taken to ensure rigour and quality. The study protocols are then described in the second section through a step-by-step account to show how the data was collected. This is provided as a narrative to describe the general design and operating features of the data collection methods in this research. This was done with purpose. Similar to natural scientific research in which the protocol serves to standardise experiments that permit reproducibility in the quest for replication of results, in this study that embraced a social type of enquiry, the protocol enhances the quality by permitting others to judge on the rigour of each step taken in the conduct of the study. The analytic process that was adopted for the qualitative aspect of this study is the Framework Analysis approach and is described in the third section. This chapter ends with the considerations towards the ethical values addressed in this research and the timeframes of the study.



## **5.1 Research methods**

### **5.1.1 Rationale for participant selection**

The intention of this study was to explore physiotherapy education in Europe in order to scrutinise the case of the influence of the Bologna Process on physiotherapy in higher education. The plan was to investigate elements of organisational governance that reflected the Bologna objectives within physiotherapy education across the wide dimension of Europe and thus a maximum variation approach (Flyvbjerg 2006) was adopted. It was planned that an investigation into the extent and impact of the Bologna Process would result by taking a close look at the country experiences through two avenues: individual experiences of selected persons and collective influences on education programmes.

When addressing the misunderstandings of case study methodology, I argued that there was the need to focus on the importance for context-dependent knowledge as opposed to context-independent knowledge and that this would link directly to the issue of transferability. This was important for me because it directly influenced the validity of this study. The selection of the participants to investigate the case had to reflect the objectives of this investigation that were underpinned to the research interest to understand any influences of the Bologna Process on physiotherapy education. Therefore the participants were selected with this purpose to be fit to address the context of this case that was governance in physiotherapy education. I decided that the participants would be information-oriented rather than randomly selected to allow me to probe and investigate the European-wide influences of the Bologna Process on physiotherapy education. The participants had to include persons who appeared to me as experts in this field and who, according to Flyvberg (2006), operated on the basis of intimate knowledge and experience at the centre of their activity. I expected these persons would possess elements of knowledge that was context-dependent and therefore they could respond to and engage in a discussion on the Bologna Process. The participants had to also reflect a maximum variation of perspectives to facilitate the transferability of the findings. The criteria for the selection of the participants therefore was based on sources that were information-oriented (experts), context-dependent (could discuss issues of organisational and administrative practices in physiotherapy education) and maximally-varied (European

wide). With these considerations and knowing that case study research design gained credibility by collecting and analysing data from multiple sources, I felt that it was necessary to investigate the case through purposefully selected sources. I chose to involve two independent groups; the heads of departments of physiotherapy schools across Europe and the country coordinators of the European Network of Physiotherapy in Higher Education (Enphe) as they met the criteria for information-oriented and context-dependent participants that allowed a maximum variation to investigate this case.

#### **5.1.1.1 Heads of departments of physiotherapy schools**

I believed that an investigation into the experiences of the physiotherapy schools was possible through the understandings of the heads of departments of these schools. It was important to maintain the focus on the context of organisational governance. My choice fell on the heads of departments of physiotherapy schools across Europe as they satisfied the criteria for selection. If organisational governance concerned elements of governability and therefore management, policy cohesion and processes for responsibility of administration of physiotherapy course programmes, then my observation was that the persons who were more likely to fulfil the criteria of experts were those heading the physiotherapy departments. My assumptions were that the head of department was knowledgeable on the administrative development in their department and that the administrative developments were not necessarily profession-led but could more likely be organisation-led. These persons may not necessarily have heard of the Bologna Process or the Bologna objectives but could have come across them unknowingly or through different ways. Notwithstanding these assumptions, I felt that the criteria to fulfil the information-oriented, context-dependent knowledge were met.

### 5.1.1.2 Enphe country coordinators

The aim of the European Network of Physiotherapy in Higher Education (Enphe) is to bring together physiotherapy educational institutions in the European region in order to provide a forum for interaction and exchange of educational developments and promote the convergence of physiotherapy educational programmes (Enphe 2009b). The coordinating committee within Enphe consisting of one representative per country, called the country coordinator, is responsible for maintaining regular contact with Enphe members in their respective countries; and to collaborate with other Enphe country coordinators (Enphe 2009a). Based on these observations the country coordinators represented those institutions that were members in Enphe. They also had the support of these members. I therefore assumed that they were knowledgeable on the general processes of physiotherapy education occurring in their country and as a consequence, they could discuss the national views of physiotherapy education also in the light of the European dimension. Considering the organisational framework and the aims according to the Enphe charter, I concluded that the inclusion of the Enphe country coordinators into this study would fulfil my criteria for information-oriented and context dependent participants. They would be able to provide me with their perspective regarding the influence of the Bologna Process on physiotherapy education in their country. This served the purpose of exploring the influence of the Bologna Process in physiotherapy education across Europe. While these participants would be addressed individually, their particular role in Enphe meant to me that they could draw into their knowledge on the wider national experiences. It was important, therefore, to also contemplate for them to be informed that this was the knowledge that was being explored from them and not their personal views.

Based on these observations and assumptions, I concluded that the views of these two independent groups (the heads of departments of physiotherapy schools and the Enphe country coordinators) would serve to illustrate and describe the influences of the Bologna Process on physiotherapy education across Europe. They allowed for an investigation at an institutional level and also at a national level. This approach permitted for a constructionist development of knowledge.

### 5.1.2 Establishing the tools and order

Once I had determined whom the participants would be in order to investigate the case, it was necessary to then decide on the methods and procedures to collect the data. Firstly I had to establish the kind of data I wanted to collect; the tools that were suitable to collect this data from each group and in what order to collect it. Secondly I needed to address any potential short comings of the data collection methods. Thirdly I had to craft the tools in a purposeful manner to ensure that they would collect the type of data that I required.

It was intended for the data to be collected as a combination of quantitative and qualitative data that would reflect the in-depth inquiry of the study. The plan was to address the Bologna objectives on a national level and an institutional level in order to assess the level of engagement with the Bologna Process. I saw surveys to be adequate to reach a wide audience whilst overcoming international boundaries. A survey allowed for the possibility to consider an entire population (Dillman 2000) such as the heads of departments of physiotherapy schools and also the Enphe country coordinators. I wanted to design survey questionnaires that could address both groups independently. The survey to the Enphe country coordinators would address the national elements of education reform whilst the survey to the heads of schools would address the institutional elements. An in-depth inquiry was therefore planned to be addressed on two levels. The survey questionnaire to the Enphe group would be comparatively shorter and focused on the principles of the Bologna Process whilst the survey questionnaire to the heads of departments would explore the operational implementation.

In addition to the survey questionnaire that served to collect mass data, I also wanted to identify any implications of implementing the Bologna Process also in the sense of the intended and unintended outcomes. It was important for me to understand what the reforms in the organisational governance meant to the participants and how they were viewing this in the wider context of the physiotherapy profession. I thought that interviews would serve this purpose well because they would allow me to not only address the experience of the Bologna Process but also its interpretation. Since it was my intention to evaluate the European-wide influences, I needed to interview participants that would reflect this. The participants to the interviews also had to fulfil



the criteria that I had set for this study. I decided to interview a sample of Enphe country coordinators because they fit these criteria.

The decision to interview only the Enphe country coordinators was taken for two reasons. Firstly I had taken as an assumption that they were informed on the national consequences of the reform processes and I was interested to explore the extent and impact on a national level. Second it was convenient for me as a researcher since my involvement in Enphe meant that I had a direct contact with these persons and this facilitated the process for me as the investigator to make contact with them and invite them for an interview. I was aware that the study would have to respect the issues of confidentiality and anonymity of the data and participants. It appeared difficult to report without exposing the source and it was necessary to protect their identity. To overcome this problem I therefore chose to use the historical development of higher education to serve as a basis for selecting the participants as suggested by Heinze and Knill (2008). From an ethical perspective this procedure would protect the individuals' identification. I decided to group the respondents into four groups that represented the three historical developments of higher education across Europe as discussed by Gellert (1999) and the fourth group would be created for those who either did not know the historical development or claimed that it derived from a different one to those suggested.

The next step was to establish an order for the collection of data. Since the two groups were independent of each other, I considered that the data collected from one did not interfere with the data collected from the other group. The data collection from each group could take place at any time and in parallel. With the Enphe country coordinators, data collection would involve an interview besides the survey questionnaire and my selection of the interviewees depended on the historical developments of higher education in the individual countries. I therefore wanted to ask the respondents themselves about the historical developments in the survey and to use their replies to group them for selection for the interviews. My assumption was that these persons would know about the historical developments, although I recognised that it was possible that they either did not know them or that their response was not correct. Therefore the procedure for the data collection order was decided for the survey questionnaires to the Enphe country coordinators to precede the interviews and the survey of the heads of departments in the physiotherapy



schools to take place concurrently. This procedure also served to keep the study connected (see figure 5.1).

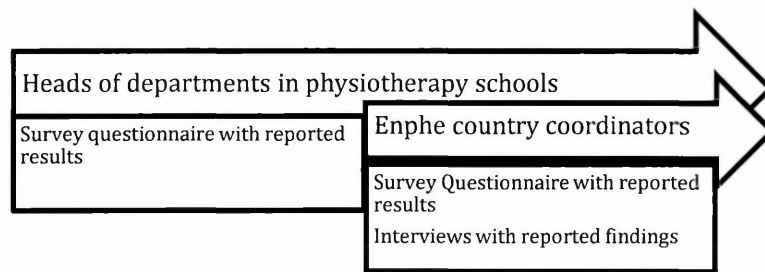


FIGURE 5.1: THE STUDY INTO THE VIEWS OF THE HEADS OF DEPARTMENTS AND THE ENPHE COUNTRY COORDINATORS WOULD TAKE PLACE CONCURRENTLY. WITH THE ENPHE GROUP, THE INTERVIEWS WERE TO FOLLOW THE SURVEY QUESTIONNAIRE.

### 5.1.3 Procedures to ensure rigour and quality

#### 5.1.3.1 Survey questionnaires

The choice to use the survey questionnaire as a tool for data collection, knowing that the participants emanated from different countries and geographical distances, meant that the survey had to be constructed in a way that would allow for its self-administration in a respondent-friendly manner. This was necessary to increase the prospect of attaining as high response rates as possible. Aspects of the survey design that affected the quality and quantity of the responses had to be considered. I first appraised the causes of survey errors and determinants of response behaviour, prior to crafting the questionnaires. I chose to follow the Tailored Design method (Dillman, Smyth and Melani Christian 2009) that outlined four sources of survey errors (sampling, coverage, measurement and nonresponsive error) that needed to be considered before the questionnaire design process and in order to make the research process valid.

Given my intention to aim towards the transferability of the results, I felt that it was necessary to ensure that all the relevant elements of the population were represented.

This effectively addressed the issue of avoiding a sampling error that could have been *'the result of attempting to survey only some, and not all, of the units in the survey population'* (Dillman, Smyth and Melani Christian 2009 p17).

The entire group of Enphe country coordinators were selected as recipients of the survey questionnaire. It was possible to include all the coordinators as Enphe held an on-line database on their website that made it possible to identify these persons including their contact information. The accuracy of this information was confirmed directly with the secretariat of Enphe. In addition, verbal permission was sought from the country coordinators who were approached during an Enphe meeting. From this I was able to compile a list of the country coordinators and their email addresses and set up a study database.

The composition of a list of the heads of departments in the physiotherapy schools presented some complications. This information was not readily or easily available. Over a period of six months between January and June 2011, I set out to create a database of physiotherapy schools in Europe. I first needed to identify the boundaries of Europe for this study as these differ in the political and geographical contexts. For example as of January 2011, there were the 27 member states within the European Union (EU), four members of the European Free Trade Association/European Economic Area (EFTA/EEA), 47 participating countries in the Bologna Process, 28 participating countries in Enphe and the 35 member organisations within the ER-WCPT (refer to appendix 3). I wanted to select countries that were signatories to the Bologna Process to reflect the subject of this case study. I was aware that in a number of countries a central database of physiotherapy schools did not exist. I was also aware that the ER-WCPT had recommended to their member organisations to compile a list of physiotherapy schools in their respective countries. In addition, any information sought needed to be publicly available in order not to violate data protection. After assessing these considerations I chose to select the ER-WCPT group as I could exchange communications with the contact persons in their member organisations in order to seek information that was not readily accessible. The next concern was then to create a database listing the physiotherapy schools in each of these European countries with the name of the head of department and a contact email address. I accessed the data available on-line through the ER-WCPT databases to obtain a list of schools in each country. When this information was not available contact was made

by email with the secretariat of the member organisation within ER-WCPT requesting this information. Once a list of schools was obtained, the next step was to search for each of these through the World Wide Web to identify the required information such as the name and contact details of the head of department and contact information details of the university/educational institute. When this information was not readily available or if it appeared that the information could have been outdated, then an email was sent to the contact address listed on the website of that school/institution requesting this information. In this way it was possible to create a database of the physiotherapy schools within the ER-WCPT with information resulting in the name of the school, the name of the head of department and their contact e-mail address. I wanted to adopt this process to minimise the risk of a sampling error. It also served to minimise the threat of the second source of error that is the coverage error. The chances of omitting persons who could not be reached either because they did not have an email address or because their email address was not publicly available was minimised. Further action was taken to minimise this risk by listing a contact person for the head of department, such as the secretary of the school, and emailing them with a request to forward the email to the head of department in those circumstances when the primary intended contact was not reachable.

A third potential source of survey error was the measurement error related to whether the respondents' answers would be inaccurate or imprecise and thus resulting in a lack of expediency in reaching conclusions. Such measurement errors could result from poor question wording and question construction (Dillman, Smyth and Melani Christian 2009). In addressing this, the fourth source of error was also considered that was the nonresponsive error of *'a significant number of people in the survey sample not respond[ing] and [having] different characteristics from those who [did] respond'* (Dillman, Smyth and Melani Christian 2009 p.17). The issues that were therefore raised with respect to these two conditions, before designing the questionnaire, were various. The linguistic design had to be clear both in terms of context and as a foreign language. The implication was towards response accuracy. This meant that the construction of the questions had to be clearly understandable and coherent for those who were comfortable with English as a language and also for those to whom English may have presented a linguistic barrier. It also meant that the questions had to be semantically understandable in all the European countries where this survey was to be



addressed. The difficulty would arise if in different countries there was a different meaning for the same word or phrase. To overcome these issues I decided on two procedures. A first step was to pilot the survey questionnaires for wording, clarity, length and ease/difficulty of response. The second step was to translate the questionnaires into non-English languages and have these translations reviewed by colleagues who were native speakers in those languages to ensure that the context and meaning remained the same. This procedure would offer the respondents the possibility of comparing the survey questions in English with that in one of these other languages that they were either native to or more comfortable with. I chose to translate only the survey questionnaire to the heads of departments to limit the costs and also since I was aware that the Enphe country coordinators were all fluent in English. The decision was taken to translate the text into French, Italian, Spanish and German based on statistics published by the Euro barometer Survey (a b European Commission 2011) on the most commonly spoken languages across the European Union. This would ensure that the chance of survey errors was reduced.

#### **5.1.3.2 Interviews**

I had decided on interviews as the method to further explore the influence of the Bologna Process within physiotherapy education as viewed by the Enphe country coordinators. As a research tool and process, the interview presented a challenge to me as the researcher – I did not have much experience in the process of interviewing and I was aware of the serious potential of shortcomings that would influence the outcome of the study. The interview process in itself is not a linear progression of events and may continually interplay between different aspects (Corbin and Strauss 1990). As a neophyte researcher I felt the need to find comfort in an accepted structure in order to avoid the shortcomings of interviewing and so I chose to consider the interview design as outlined by Kvale (1996).

*'In modern social science the concepts of generalisability, reliability and validity have reached the status of a scientific holy trinity'* (Kvale 1996 p.229). This conveyed an importance to me as the researcher in a social science arena to pay attention. Generalisability, validity and reliability throughout the interview process were an important consideration. These could be debated by the critics of social inquiry

research as being of insufficient strength when compared to the claims of generalisability as laid in the positivist approach. Stake (2005) proposed three issues to address generalisability for case studies. The first was naturalistic generalisation that rested on the personal experience (Kvale 1996). It appeared necessary for me to be descriptive in the reporting of the interviews so that readers would recognise essential similarities to cases of interest to them. The second, statistical generalisation was more formal and explicit and depended on the random selection of the interviewees. I wanted to group the Enphe country coordinators in order to protect their identity but needed now to consider ways of selecting the interviewees from each group. Considering time constraints of the study and the different claims towards appropriate number of participants to an interview (Mason 2012, Flick 2012, Doucet 2012) I decided that I would interview up to a maximum of twelve persons. Three persons would be randomly selected from each of the four groups by 'pot luck' draw. In the event that there would be three or less in any particular group, then all the persons would be selected. In this way criteria for statistical generalisation would be followed. The third, analytic generalisation would then be based on similarities and differences (Kvale 1996) following the construction of an interview guide.

Reliability and validity issues that would impinge on the truth of the findings had to be addressed from the start of the process. Interviewer reliability as suggested by Kvale (1996) pertained to my potential influence during the interview and had implications for the analysing stage. To minimise the risk of poor interviewer reliability I was therefore conscious of needing to avoid leading questions. *'The fact that the issue of leading questions has received so much attention in interview research may be due to naïve empiricism. The decisive issue is then not whether to lead or not to lead, but where the interview questions should lead, and whether they will lead in the directions, producing new, trustworthy, and interesting knowledge'* (Kvale 1996 p. 159).

With regard to interviewer reliability in the analysing stage, Kvale argued that the categorisation of themes can emerge in a significantly different way if an interviewer followed a structured interview guide. As the sole researcher I was not concerned with reliability of more than one analyst. The emerging design of qualitative studies encourages building on data in an evolving way; that is to learn from the interviews and build on them as the interviews progress, although always aware of keeping within the context of the case study. I wanted to prepare an interview guide based on a semi-



structured interview approach which would allow the interviewee flexibility to reply to a set of questions or topics to be addressed (Bryman and Bell 2007). At the same time it would allow me the liberty of exploring further if indicated. I wanted the interview guide first to be scrutinised by academic colleagues for bias and then to be piloted with the purpose of familiarisation and calculation of the estimated time taken to complete.

Intersubjective reliability or '*transcriber reliability*' (Kvale 1996 p.163) pertained to the techniques and procedures followed during the transcribing stage. This assumed the interviews had to be recorded and that the recordings were to be transcribed.

Recording and transcribing has a number of advantages as suggested by Heritage (1984). Recordings help to reduce limitations of memory and transcribing allows a thorough examination of what people say because it permits repeated examination. It also opens up the data to scrutiny by others and reduces the implications of researcher bias. It may allow data to be used in other ways in the light of emerging theory or analytical strategies. Yet, recording and transcribing must also be considered in the light of some potential shortcomings. Recording requires that the interviewee consents to be recorded and that appropriate equipment is used. Once the recording is complete it would be necessary to transcribe the speech to text. This could take as long as six hours for each hour of speech (Bryman and Bell 2007) and may result in errors due to mishearing, fatigue and carelessness (Poland 1995). Certain steps would need to be addressed therefore to check on the quality of the transcription (Bryman and Bell 2007) as different transcription methods are employed by different transcribers (Kvale 1996). I needed to know this to ensure greater transcription reliability. A final reflection had to consider what to do with the recordings and transcriptions in view of ethical implications. Recording of the interviews would follow signed informed consent and be digitally recorded to ensure a high quality of audio which could be stored on a password protected Personal Computer. Due to issues of time, the recordings would be split for transcription between me and another person who would agree to confidentiality of handling the data and with the specific instruction of transcribing verbatim. All the transcribed documents would then undergo a reliability check during which the entire recording would be played back and listened to, by me whilst reading through the transcription and taking note of, and correcting errors. The original transcriptions would be stored on a password protected

Personal Computer and a copy of these would be edited to remove any identifying reference to the interviewee, people and places as necessary. The recorded interviews would be destroyed at the end of the study.

Validity issues raised the question of whether the investigation was actually addressing the research purpose (Arksey and Knight 1999). Investigation through human interaction and the exploration of people's perspectives also raised some ethical considerations. This had to be addressed with beneficence<sup>16</sup> in the design stage to ensure concepts of trustworthiness, credibility, dependability and confirmability (Guba and Lincoln 1985) throughout the entire process. I needed therefore to inform the interviewees of the nature and process of the interview, requesting their signed written consent to participate following them reading an information sheet. During each interview the trustworthiness and the quality of the interview would be enhanced by referring to the interview guide and clarifying the interviewee's statements. The transcriptions would be verbatim, checked and then sent to the interviewee for their confirmation within a set time period after which the data could be taken into the study. This would satisfy the construct validity (Yin 2009).

## **5.1.4 Designing the tools**

### **5.1.4.1 Designing the survey questionnaire**

Preferred methods of survey distribution are either mail or internet based surveys (Kaplowitz, Hadlock and Levine 2004; Dillman, Smyth and Melani Christian 2009). Internet based surveys are efficient in reducing costs by near elimination of paper, postage, mailing out and data entry costs (Dillman 2000) and in addition, they offered the possibility of overcoming international boundaries and to survey as many people as possible. Kalpowitz, Hadlock and Levine (2004) reported that internet based survey applications compared to the response rates for mail hard copy questionnaires (non-linear correlation,  $\eta = 0.085$ ) but at a significantly lower cost if preceding the survey by an advance notification and subject to the study population having access to internet. In designing the survey I also had to consider social exchange elements that affected

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<sup>16</sup> Beneficence involves 'producing knowledge beneficial to the human situation while minimising harmful consequences' (Kvale 1996 p. 237)

response rates thus aiming to maximise the response rate. I contemplated this through the actions of explaining the task to the respondent in a clear and coherent manner and offering a motivational incentive. In addition to ensuring security and confidentiality that is a standard procedure, the emphasis on it was meant to enhance trust in the survey.

Internet survey methods are possible by email or web-based tools that both offered advantages and disadvantages (Dillman 2000). Web-based surveys (WBS) had a refined appearance and provided better survey capabilities such as allowing for complex and extensive skip patterns that would be invisible to the respondent. This advantage however came with an increased risk of coverage survey error particularly related to the technical sophistication that may have made it impossible for some internet users to use. Though email surveys appeared simpler to compose and distribute they were more limited than WBS in their visual stimulation and interaction capability and provided fewer options for dealing with structural features in the questionnaire design.

I decided that the mode of delivery/retrieval would be electronically based via the World Wide Web using the web-based survey method. I opted for a certified and accredited web-based software programme SurveyMonkey<sup>®</sup> to increase the reliability and repeatability of the method. It also facilitated the construction and gathering of the data responses in an automatic fashion. As Dillman (2000) suggested, there was the increased chance of survey errors and that obtaining responses from large numbers did not substitute the need for good coverage. I was conscious of this and followed the principles of design for web based surveys (Dillman 2000 p.376-398) to design the survey as follows.

I chose to design the questionnaire for both groups in a similar fashion, on separate pages with a distinct page title header that indicated the context of the questions on that page. Every question was numbered sequentially starting from number 1 and continuing through to the end of the questionnaire. At the bottom of each page the control that permitted to proceed to the next page or go back to the previous page was fixed and in addition a progress bar was visible. At the top of each page there was an 'exit' button that allowed the respondent to leave the questionnaire. The opening page introduced the survey with instructions to the respondent. It also indicated an

approximation of the time that was anticipated for completion of the survey. A motivational statement emphasised the importance of the study and contact details were provided that allowed the respondent to address queries or concerns. The first question asked all the respondents on their awareness of the Bologna Process with a skip logic function in the event of a negative answer. Otherwise the respondent was directed to a further set of initial questions that asked for them to rate their understanding of the Bologna Process. The following page was common to all the respondents and included general questions. Amongst these there was the only forced answer question that indicated the country. This was necessary as without this information the replies could not be contextualised. The ensuing pages then addressed the specific objectives of the Bologna Process with each objective on a different page and headed accordingly. In addition to the heading, a small description of the objective or a definition of important terms was provided and if warranted a uniform resource locator (URL) was indicated from where further information could be accessed online. The final page had a 'Thank You' note that also offered the respondent with an opportunity to leave a comment.

The survey questionnaire to the heads of departments in the physiotherapy schools was planned to include questions related to the implementation of the Bologna objectives in their institution. The questions were intended to assess the respondents' knowledge of the Bologna Process followed by questions to assess the extent of the implementation of administrative procedures that were reflected in the Bologna objectives (see appendix 4). The survey questionnaire to the Enphe country coordinators was planned to include questions related to the influence of the Bologna objectives in their country. The focus of this questionnaire was to assess if the Bologna Process was being implemented as a national or institutional requirement (see appendix 5).



#### 5.1.4.2 Designing the interview

Following the survey of the Enphe coordinators, my aim was to explore further into their perspectives and for them to describe what was relevant and important (Bryman and Bell 2007). The interview as a method made this possible. Interviews may be carried out in various forms and approaches (Kvale 1996). There were the individual interviews and the group interviews to consider. Also, four types of interviews are generally deliberated. The informal, conversational interview had no predetermined questions in order to remain as open and adaptable as possible to the interviewee's nature and priorities. The general interview guide approach was intended to ensure that the same general areas of information would be collected from each interviewee thus providing more focus than the conversational approach but still allowing a degree of freedom and adaptability in getting the information from the interviewee. The standardised, open-ended interview ensured that the same open-ended questions would be asked to all interviewees; this approach facilitated faster interviews that could be analysed and compared more easily. The final type to be considered was the closed, fixed-response interview during which all the participants would be asked the same questions and requested to choose answers from among the same set of alternatives.

During the design stage it was felt that what counted most was that the participants could freely discuss what they felt were the outcomes of the Bologna Process; or at least that they could discuss the course programmes within the framework of the Bologna Process. It was necessary that the participants stayed as close as possible to the elements of the Bologna Process. It was also desirable to allow them to wonder off with the intention of exploring whether there could have been any outcomes that could be linked back, directly or indirectly, consciously or unintentionally to the Bologna Process. The general interview guide approach was followed. With this type of interview there was a structure but this was not so rigid. It allowed the participant to talk at length on what they felt was important but at the same time I could refer back to the guide to ensure that all the topics that were intended for discussion were actually discussed. The major drawbacks of this approach were that the interviews could become lengthy affairs that would require longer transcription and analytical



periods; and also it was not possible to directly compare the responses of the different participants.

I chose to carry out semi-structured interviews with an interview guide. This would serve to indicate the topics and the sequence of discussion in the interview relating to both the thematic questions such as those related to the Bologna Process and the dynamic questions (Kvale 2006) such as those related to their feelings and experiences. In designing the guide I chose to follow the steps as presented by Bryman and Bell (2007). The topics for discussion were written down to address the primary concerns emerging from the research question as suggested by Lofland and Lofland (1995). This resulted in the creation of the interview guide (see appendix 6) that served as a prompt for me to ensure that all the necessary formalities were followed and also to verify that all the topics were covered. This was done to ensure that the participants spoke freely with their own emphasis on important factors as they saw them.

Another consideration was to deliberate whether the individual interviews were to be carried out face-to-face or otherwise. One of the big disadvantages of individual interviews is the length of time that would be required to conduct and follow up each interview. Within this study, this took greater significance since the participants were all located in their respective countries; which meant that either I would have to travel to carry out the interview or that the interviews would have to be carried out at a time when the participants would most likely be all together, such as at an Enphe meeting. The latter would also have implied that the number of interviews would have to be reduced due to time constraints. The participants would be at the meeting on official business and any interviews would at best have had to be carried out in their free time. The type of interviews had to be considered. The different options that were contemplated were face-to-face, telephone and computer-based communication using either audio or audio-visual applications. One advantage of the face-to-face interview is that the interviewer could observe the participant's non-verbal behaviour during the interview. The observer with no specialised training (such as me in this study) would probably be able to infer information about emotions, attitudes, interpersonal roles and severity of pathology rather accurately (Ekman and Friesen 1969). The consideration had to be based on these elements and how important they were to the outcome of the study. The latter observation regarding severity of pathology was not relevant.

When considering these elements within the context of the interviews for this study, it was also necessary to keep in mind the issues of research ethics. Besides the moral qualities of informed consent and confidentiality, there were also the issues of consequences (Kvale 1996). The consequences of knowledge were considered in the way that the participants could have found themselves in a situation whereby they could not have fully engaged with or understood the elements of the Bologna Process and as a consequence this may have led to an embarrassment (emotion) on their part. This could have had implications on the disposition of the participant during the interview. A face-to-face interview would have made it possible to capture such emotions with the risk of negatively affecting the participant's disposition; on the other hand an individual interview without visual input may have precluded this information allowing the participant to fully engage in the interview. It was decided that the non-verbal behavioural input from the participants was not that important to this study, except maybe in the case when the participant might not feel so comfortable to discuss a particular situation for the reasons discussed. I decided to offer the participants the choice of an individual interview via computer-based programmes and it was at their discretion whether to use visual input or not. The participants were also given the opportunity to have an individual face-to-face interview in *prima persona* should the circumstances have facilitated such a method. Ultimately the final decision was left at the discretion of the participant.

A final consideration was to determine the number of participants to interview. To the question 'How many interview subjects do I need?' Kvale (1996 p. 101) provides this answer '*Interview as many subjects as necessary to find out what you need to know.*' Kvale argued that the interview number should be  $15 \pm 10$  and that the final number should be determined by the law of diminishing returns, when further interviews lead to little new knowledge. This view is underpinned to the theoretical saturation derived from the account by Glaser and Strauss (1967) of grounded theory. The considerations of time and resources were also pertinent. The participatory numbers had to finally meet the study's purpose of exploring and evaluating the influences on a European level. The choice was between interviewing each country coordinator or a representative sample. Interviewing each country coordinator meant that 28 persons would have to be interviewed. It would have been ideal to interview all of them but this had implications on resources, especially time. The interviews had to be

coordinated and booked well in advance; they had to be transcribed and analysed. The selection had to be carried out keeping in mind the purpose and the issues towards transferability. Interviewing all the Enphe country coordinators was ruled out. The remaining options were two. The first consideration was to randomly select a number of participants from amongst the Enphe country coordinators. This could have led to a situation in which the selected participants could have come from countries which were, more or less, similar and as a consequence would have experienced similar influences. This would have presented difficulties to transfer the findings to a European context. The second consideration was to purposefully separate the countries into groups that represented different historical traditions in higher education and only then randomly selecting the participants from within these groups. The latter method was followed since it fit the purpose of the study and also respected methodological concerns. What was left was to determine the actual number of participants. Miller (2012 p.31) argued that interviews are actually an artificial procedure aimed mostly at allowing the informers to make a connection between the researcher and the topic and that from a pragmatic point of view *'circumstances dictate a resilience upon interview data'*. His ideal number is zero. The most candid response to the ideal number is 'it depends' (Mason, 2012; Flick, 2012; Douchet, 2012). For Denzin (2012) one interview is enough since empirical generalisation is not the goal in qualitative research. Charmaz (2012) suggested increasing the number of interviews when pursuing a controversial topic; anticipating or discovering surprising or provocative findings; constructing complex conceptual analyses; and/or seeking professional credibility. Her advice is to learn what constitutes excellence rather than adequacy and to conduct as many interviews as needed to achieve it. Bryman (2012) in reference to the 20-30 interviews (Warren 2002) and the 60-150 interviews (Gerson and Horowitz 2002) being regarded as the minimum requirements for sample sizes in qualitative research points that in reality sample size should be influenced by the theoretical underpinnings, the heterogeneity of the population and the breadth and scope of the research questions. Having considered these various arguments for the number of participants, it did appear that the three participants selected randomly from each of the three different historical traditions in higher education and the fourth supplementary group representing unidentified traditions have met the various criteria established and were representative and justified.



## 5.2 The study protocol

### 5.2.1 Heads of departments of physiotherapy schools

The survey questionnaire to the heads of departments was first scrutinised by academic colleagues for clarity of wording, format and content. The survey questions were customised onto a certified web-based on-line programme (SurveyMonkey®). The survey questionnaire was then purposefully pilot tested by sending it to twenty colleague physiotherapy educators across Europe, asking them to comment on the wording, clarity, length and ease/difficulty of response. The reactions from the pilot sample were considered within two weeks from being sent and assessed for improvements and optimisation. The survey questionnaire was then translated from English into French, German, Italian and Spanish<sup>17</sup> by certified translators. A final test was carried out by sending the translated survey questionnaires to four colleagues whose mother tongue is in these languages asking them to verify that the context had not changed.

An email was sent to the heads of departments notifying them that they would shortly be receiving the questionnaire through electronic post inviting them to participate in the survey (see appendix 11). A few days later a first survey email was posted to them containing the electronic link to the survey accompanied by a covering note (see appendix 12). The five language versions of the survey questionnaire were attached as a soft copy in portable documented format (Adobe Acrobat® .pdf) with this email. These documents were sent with the purpose to facilitate reading and comprehension and if the participants preferred they could print out a paper version to read. The participants were asked to reply to the survey questionnaire within the ensuing two weeks. I purposefully chose to send the email on a Wednesday as I figured that choosing either the beginning of the week or the end of the week may have influenced the response rate. I assumed that on Monday people are usually returning to work following the weekend and anticipating a lot of work; on a Friday people are normally looking forward to the weekend.

A first reminder was sent after two weeks to all the participants (see Appendix 13). This reminder included, in addition to the original note, a statement towards the

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<sup>17</sup> See appendices 7, 8, 9 and 10

gentle reminder and a dismissal note/thank you in the case that the survey had been completed. This was necessary as I had no information towards the identity of the respondents. A second and final reminder was sent once again to all the participants after a further two weeks. In this final reminder the response rates for every country at that particular time were included (see appendix 14). This was done with the intention of further encouraging those who had not yet responded to the survey to do so. The data from the survey responses was analysed using descriptive statistics to indicate the responses of the heads of departments.

## **5.2.2 Enphe country coordinators**

### **5.2.2.1 Meeting with the Enphe country coordinators**

In March 2010 a meeting was arranged with the Enphe country coordinators and organised to coincide with the Enphe conference in Riga (Latvia) where I introduced myself and informed those present on the nature of the study, outlining the aims and objectives, and the procedures. I also gave them assurances of anonymity and confidentiality. They were informed that no reference in a final report would be made to them or their country in a direct manner unless with their approval and following a privileged preview of the report with their consent to proceed. The twenty seven persons present received an information letter in which the nature of the study was outlined.

### **5.2.2.2 Survey questionnaire to Enphe coordinators**

The survey questionnaire to the Enphe country coordinators was scrutinised by academic colleagues for clarity of wording, format and content. The survey questions were customised onto a certified web-based on-line programme (SurveyMonkey®). The survey questionnaire was then purposefully pilot tested by sending it to ten physiotherapy educators within Enphe who acted as substitute country coordinators, asking them to comment on the wording, clarity, length and ease/difficulty of



response. Their reactions were considered and assessed for improvements and optimisation with the purpose of finalising the survey questionnaire.

A personalised email was sent to all the Enphe country coordinators notifying them that they would shortly be receiving the questionnaire through electronic post inviting them to participate in the survey (see appendix 15). A few days later a first survey email was posted to them containing the electronic link to the survey accompanied by a covering note (see appendix 16). Two attachments were posted with this email. One was a soft copy of the survey questionnaire and the other was an annex to the questionnaire that described certain terms used in the questionnaire that warranted further explanation (see appendix 17). Both documents were attached in portable documented format (Adobe Acrobat<sup>®</sup>.pdf) which they could print out and read. Once again, and for similar reasons as described previously, I purposefully chose to send the email mid-week.

The participants were asked to reply to the survey questionnaire within the ensuing four weeks. A first and final reminder was sent after three weeks to those who had not replied to the survey (see appendix 18). The data from the survey responses was analysed using descriptive statistics to indicate the findings of the questionnaire.

### **5.2.2.3 Interviews**

Four weeks following the reminder to reply to the questionnaire, a purposeful sample of respondents was selected from the responders to be invited to an interview. I adopted the following criteria in the selection process. The respondents were grouped according to their response on the historical development of higher education in their country (question 3 of the survey questionnaire). Three participants were randomly selected from each of the four groups. In the event that any particular group had three or less respondents in that group, then all of them were selected. In the event that any particular group had no respondents, then a further participant would have been selected from the group/s that had most replies maintaining a proportional ratio of respondents per group. In any case a limit of 35% to 50% of the respondents was set for the selection of participants to be invited for an interview as this was considered to be a fair representative sample within the limitations imposed by time

and resources. An e-mail was sent to those selected inviting them to participate. The email included a short note explaining why they were selected (see appendix 19). In the event that a selected person informed that they were not able to participate they were asked to nominate someone from their country whom in their opinion would be proficient to speak about the Bologna Process and physiotherapy education in their country. In this eventuality the nominated person was to be contacted and clearly informed about the reason for which the contact was being made. This was to be followed with a written invitation sent to them to participate in the study/interview.

All those who agreed to participate in the study were proposed a schedule of possible dates and times for the interview that were to be held between June and July 2011.

Since the congress of the World Confederation of Physiotherapy was held in June 2011, the participants were also given the option of a face-to-face interview at a mutually convenient time and place at the congress venue. The participants were forwarded with an information sheet (see appendix 20) and asked to give signed consent to the interview (see appendix 21). Arrangements were made to organise a mutually convenient date and time for the interview. Skype<sup>®18</sup> was used to facilitate computer-based audio communication in a synchronous environment in real-time and when possible visual interaction with webcam was used. The conduct of the interviews followed the interview guide. All interviews were digitally recorded. The recorded interviews were transcribed verbatim from oral speech to written text. The transcribed interviews were sent to the participants for their comments and corrections. They were asked to respond within a month. The participants were informed that in the event that a reply would not be received from them then it was considered as a true and correct transcription of the interview.

Once a final verification of the transcribed text was considered complete, each transcription was labelled to protect the interviewee anonymity by assigning the letter P for participant and a number 1, 2, 3...n. This information was only known to me as the researcher. All documents were digitally saved on a separate password protected document and stored on a password protected Personal Computer and data storage device accessible only by me as the researcher. The digital recordings were deleted at

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<sup>18</sup> Skype is a proprietary Voice over Internet Protocol (VoIP) service and software application. The service allows users to communicate with peers by voice using a microphone, video by using a webcam, and synchronous messaging over the Internet.

the end of the study and the transcribed text shall remain in my possession for five years.

### 5.3 The analytic process

The interviews were analysed following the *framework analysis* approach described by Ritchie and Spencer (2002). The five key stages of framework analysis (sometimes also called *thematic analysis*) are familiarisation, identifying a thematic framework, indexing, charting and mapping and interpretation. In this study these stages were addressed in a linear fashion. The thematic framework was developed by building upon a set of *a priori* themes that were identified earlier on and it was continually revised up till the end of the analytic process (figure 5.2). The familiarisation stage of the analysis started before all the interviews were recorded by immediate repeated listening to the recordings, transcription processes and reading of the transcriptions. This was done with intent to fuel further discussion in the other interviews through the emerging design approach.

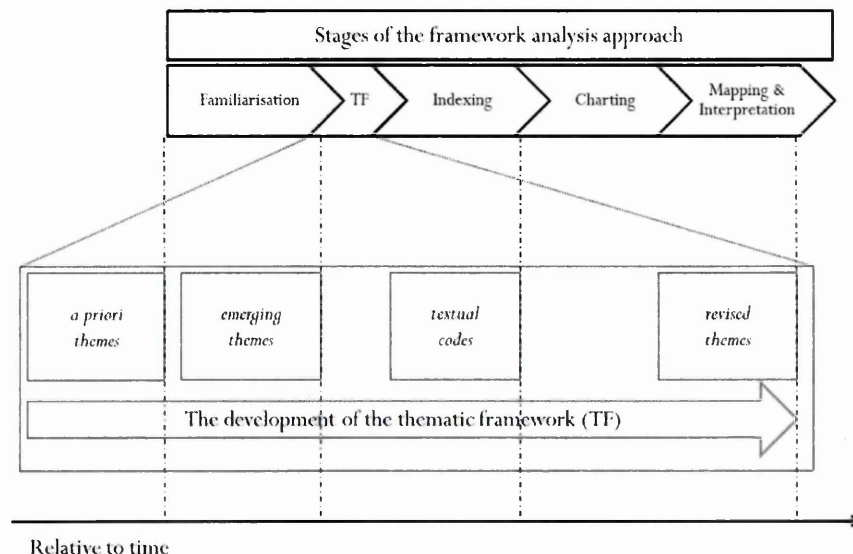


FIGURE 5.2: THE FIVE STAGES OF THE FRAMEWORK ANALYSIS APPROACH (RITCHIE AND SPENCER 2002) AND THE DEVELOPMENT OF THE THEMATIC FRAMEWORK FOR THIS STUDY

### **5.3.1 Stage 1: Familiarisation**

The familiarisation stage involved getting immersed and familiar with the data. During this stage the digital recordings of the twelve interviews were played back and then transcribed verbatim. This resulted in the written scripts for each of the interviews and also the emergence of raw thoughts and themes that could and would be explored at a later stage. On completion of the transcription each document was word processed and then forwarded to the interviewees for their comments. All reference to names and places were then removed from the text and coded in line with participant and country. These were then uploaded onto the qualitative data analysis software QSR NVivo 9<sup>®</sup> with a licence key from Sheffield Hallam University that served to facilitate the analytic process.

### **5.3.2 Stage 2: Identifying a thematic framework**

The construction of the thematic framework started well before the familiarisation stage and continued to be developed up till the end of the analytic process. The development of the thematic framework had to serve two purposes. First, it served to create a database of themes that would be used to filter the data according to the research purpose; and secondly, in turn, to guide the research and analytic process back to the unit of analysis that had already been defined with the context of this Case Study.

Ultimately the thematic framework would serve to help me filter the emerging key influences of the Bologna Process on physiotherapy education across Europe that were being investigated and explored (see figure 5.3). For this reason the thematic framework had to be reviewed and refined at each stage as the emerging themes gave contribution to the constructionist approach.



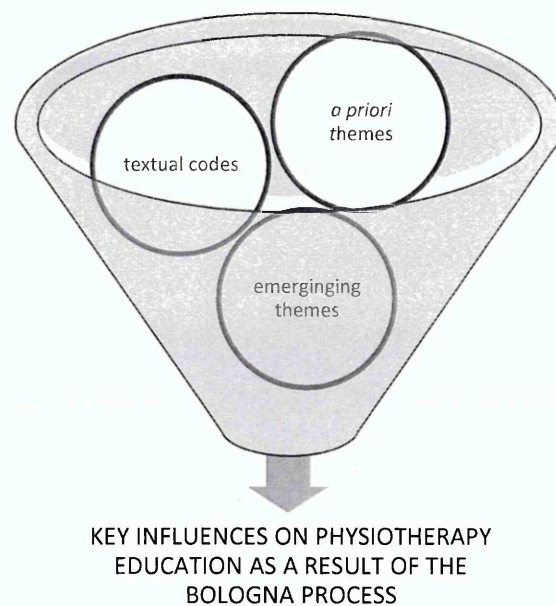


FIGURE 5.3: THE EMERGING CONSTRUCTIONIST VIEW OF THE INFLUENCE OF THE BOLOGNA PROCESS ON PHYSIOTHERAPY EDUCATION ACROSS EUROPE

### 5.3.3 Stage 3: Indexing

The indexing stage entailed the tagging of specific sections of text from the transcripts (i.e. the textual data) with the textual codes. Even though Ritchie and Spencer (2002) recommend the use of numerical references at this point, the textual codes were maintained. This was carried out with the intention of further refining the themes at a later stage. The indexing stage was accomplished by reading through all the text, taking a paragraph at a time, and textually coding the sections. To facilitate this process the software programme QSR NVivo 9<sup>®</sup> was used.

### 5.3.4 Stage 4: Charting

The charting stage consisted of extracting the tagged sections of text into different thematic charts, each one corresponding to the textual code. QSR NVivo 9<sup>®</sup> was also utilised at this stage. This resulted in a large amount of data characterised by a thematic heading and relevant sections of text from the participants' transcripts. Each thematic chart carried the name of the textual code, the coded reference to the participant (for example Participant 10) and the number of sections extracted for that participant with that particular textual code.



### **5.3.5 Stage 5: Mapping and Interpretation**

The thematic charts were coded with a letter and analysed in-depth. At this point the sections of text from the indexing stage were refined as appropriate into shorter sections. This served for the extraction of direct quotes at a later stage and to substantiate the emerging debates and key influences. The final phase of the analytic approach consisted of a final revision of the thematic framework. These themes would represent the findings following the interviews. They would serve for the assessment by a sense-making approach and eventually, together with the findings of the survey questionnaires, to explore the influences of the Bologna Process on physiotherapy education across Europe.

I decided that each of the emerging themes had to be reported separately, even though they could not have been mutually exclusive. In doing so I was aware that the presentation of the findings might appear to manifest some repetition. This was planned with purpose to acknowledge the different viewpoints with which the perceptions were analysed. Ultimately these issues will reflect the general understandings with reference to the influences of the Bologna Process on physiotherapy education across Europe.

## **5.4 Ethical considerations**

The exploration into the Bologna Process was an inquiry that focused on organisational and administrative processes and outcomes in physiotherapy education with the intention to share the findings with the broader scholarly community. The study explored the opinions of physiotherapy administrators in higher education. The key issues in this research were therefore governed by ethical principles of informed consent, anonymity, confidentiality of data, data storage and management. Participants in the study possessed attributes that made them identifiable within the community of physiotherapy educators since they were either representing institutions or elected country coordinators on the Enphe coordinators committee. The inquiry depended on the information that these specific persons gave and was necessary so that the results of the investigation would be transparent. It was also enlightening to use the information for any eventual comparison between countries.

This would seek to avoid some of the flaws identified in a similar study by Staes, Stappaerts and Myles (2001). The implications for ethical considerations of anonymity were addressed by assessing the likely damage that could have arisen from the identification of the source (such as embarrassment) versus avoidance of unacceptable measures of distortion in the data (British Sociological Association 2004). Anonymity may have affected the integrity of the data or the arguments being explored and presented. Methods for preserving anonymity were adopted by grouping the data into historical development clusters. In those instances when anonymity could not be guaranteed without detriment to the outcome of the results, the participants were asked to sign an informed consent sheet which clearly indicated that it could be difficult to disguise their identity without introducing an unacceptably large measure of distortion into the data. A double consent approach was adopted for the interviews when transcripts were sent back to the participants for their evaluation regarding the dissemination of the data. This could have led to an undesirable consequence of withdrawal from the study in total or in part and hence affecting the overall aims of the study. If this situation had occurred then the protection of the participants' identity would have taken precedence over the publication of data. The issue of confidentiality related to the management of data and the dissemination of the information that had been discussed. This was integral to the research process. Written consent was sought from the participants. Recorded interviews and transcripts were stored electronically on a password protected server owned by me and any hard copies were stored in a secure filing cabinet. All transcripts were coded for participant and country. They were managed by me and the appointed transcriber and were available for scrutiny by academic supervisors.

Data to be published shall be reported without direct reference to the individual.

When necessary and for evaluation purposes, only reference to the country or region shall be made without ever directly indicating the participant.

Other sources of ethical consideration were also explored in the context of conflicts of interest for the researcher and the participants. I stood to gain insight into the deeper understanding and overview of the Bologna Process. The participants had access to their data and experience, yet they may still have benefited from this research by taking the opportunity to examine the events in detail as they occurred in relation to the Bologna Process. At the same time there was the threat that the participant could

have felt that they should have been more knowledgeable on the subject. This was explained to the participants in an information letter where it was stated that the aim of this research was not to explore their knowledge on the subject but to explore their reflections on the situation as it was.

## **5.5 Timeframes of the study**

This study commenced as a professional doctorate degree in October 2007 and switched to a research degree by PhD in August 2009. The Research Degrees Sub-Committee at Sheffield Hallam University (UK) approved my application of the research programme in November 2009 (see appendix 22). The Research Ethics Review Group gave favourable opinion and accepted my study for continuation in November 2010 (see appendix 23). An application for additional time to complete the research degree was endorsed in July 2012 (see appendix 24).

The period for the data collection was spread over six months between March and August 2011. Survey questionnaires to the Enphe country coordinators were distributed in March 2011. The twelve interviews that followed were held between June and July 2011 and the transcriptions were forwarded to the participants between August and September 2011. The survey questionnaires to the heads of departments were distributed in April 2011.

### **Conclusion**

This chapter has described and discussed the research methods and procedures adopted in this study. It has also provided an explanation of the ethical issues that were considered and the timeframes. In the journey of the research process this now leads to chapter 6 of the thesis that shall report on the findings of the survey questionnaires.

# Chapter 6

## *The Survey Findings*

Chapter 6 of this thesis presents the findings pertaining to the survey questionnaires of this research study. It is divided into two sections:

- Section 6.1 reports the findings on the range of responses to the survey questionnaire by the heads of departments of physiotherapy schools (n = 201) between March and April 2011. They were instructed to submit their response to the questionnaire electronically using the web-based survey programme Surveymonkey®.
- Section 6.2 reports the findings on the range of responses to the survey questionnaire by the country coordinators of the European Network of Physiotherapy in Higher Education (Enphe) (n = 28). They were also instructed to submit their response to the questionnaire by electronic means using the Surveymonkey® programme.

When writing this chapter the intention was to uncover the extent of the implementation of the Bologna Process within physiotherapy education programmes on two levels: the institutional level and the national level. This chapter is followed by a report on the interview findings.

### **6.1 Survey findings (Heads of departments)**

The questionnaire to the heads of departments was divided into three parts: the first part explored the respondents' understanding of the Bologna Process and their perception on the influence of it in their respective countries; the second part explored the general conditions for institutional governance of physiotherapy education; and the third part explored the implementation of the Bologna Process objectives at the level of the individual institution. A return rate of 45.3% (91/201) was attained.



### 6.1.1 Population, sample size and return rate

- Population and sample

35 countries represented within the ER-WCPT were selected to form part of the study. Following direct communication with the Enphe country coordinator for France, it was decided to exclude France from the study on the basis that the Bologna Process had not been endorsed for physiotherapy programmes up till the time of the data collection. Cyprus, Liechtenstein and Luxembourg did not have any physiotherapy programmes at the time of this study and thus they were also excluded. The list of physiotherapy schools in Croatia, Greece, Poland, Serbia and Romania was not compiled by the time this survey questionnaire was distributed. The resultant number of countries that formed part of the study was 26. These were Austria, Belgium, Bulgaria, Czech Republic (CZ), Denmark, Estonia, Finland, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lebanon, Lithuania, Malta, Montenegro, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom (UK).

The names and email addresses of 213 heads of departments were identified from the 288 Universities/Institutions where it was reported or recorded that physiotherapy was taught within these 26 countries. Following a notification email sent to these, it that 12 email addresses were either incorrect or undeliverable. This meant that the number of valid email addresses to which the survey was distributed was 201.

- Survey return

99 replies to the questionnaire were received and recorded on SurveyMonkey®. Five respondents did not register the name of their country and since this was the only forced answer they could not continue the survey. These replies were discarded. Two returns were noted to include only the country name with the responses to all the other questions remaining blank. These were also discarded. One respondent was noted to have submitted two replies of which one was complete and the other only registered the country name but with no other responses. The empty questionnaire was discarded. This resulted in 91 valid returns to the survey questionnaire. Table 6.1 and 6.2 present a summary of these preliminary findings.

TABLE 6.1: SUMMARY OF THE TOTAL POPULATION AND THE SELECTED SAMPLE

<b>Number of countries selected for study</b>	<b>35</b>	
Number of countries excluded as the Bologna Process had not started	1	France
Number of countries without PT schools	3	Cyprus, Liechtenstein, Luxembourg
Number of countries where a list of physiotherapy schools was not identified	5	Croatia, Greece, Poland, Romania, Serbia
<b>Total number of countries excluded from the study</b>	<b>9</b>	

<b>Total number of countries included in this study</b>	<b>26</b>
Number of Physiotherapy schools identified in these countries	288
Number of heads of departments identified	213
Number of valid contact email addresses	201
Number of survey questionnaires distributed	201
Number of survey questionnaires received	99
Number of valid survey questionnaires received	91

**TABLE 6.2: SUMMARY INDICATING THE NUMBER OF SCHOOLS IDENTIFIED IN THE 26 COUNTRIES; THE NUMBER OF HEADS OF DEPARTMENTS THAT WERE RECOGNISED AND THEREFORE INTENDED RECIPIENTS OF THE SURVEY; VALID RETURNS AND RESPONSE RATES FOR EACH COUNTRY.**

	Number of schools identified in the country	Heads of Departments who received survey	Valid Returns	Response rate (%)
Austria	10	7	6	<b>85.7</b>
Belgium	17	12	4	<b>33.3</b>
Bulgaria	1	1	0	<b>0.0</b>
CZ	10	3	2	<b>66.7</b>
Denmark	9	4	2	<b>50.0</b>
Estonia	2	2	1	<b>50.0</b>
Finland	16	16	6	<b>37.5</b>
Germany	22	11	4	<b>36.4</b>
Hungary	5	4	3	<b>75.0</b>
Iceland	1	1	1	<b>100.0</b>
Ireland	4	4	2	<b>50.0</b>
Italy	38	26	8	<b>30.8</b>
Latvia	3	3	1	<b>33.3</b>
Lebanon	6	6	2	<b>33.3</b>
Lithuania	9	4	3	<b>75.0</b>
Malta	1	1	1	<b>100.0</b>
Montenegro	1	1	1	<b>100.0</b>
Netherlands	11	5	2	<b>40.0</b>
Norway	4	3	1	<b>33.3</b>
Portugal	18	18	8	<b>44.4</b>
Slovenia	1	1	1	<b>100.0</b>
Spain	42	21	7	<b>33.3</b>
Sweden	8	5	4	<b>80.0</b>
Switzerland	4	3	1	<b>33.3</b>
Turkey	10	8	2	<b>25.0</b>
UK	35	31	18	<b>58.1</b>
<b>Total</b>	<b>288</b>	<b>201</b>	<b>91</b>	<b>45.3</b>

### 6.1.2 Findings on the awareness of the Bologna Process

The first question addressed in the survey asked for the respondents to declare if they were aware of the Bologna Process. If they replied in the affirmative they were then questioned on their understanding of it. Nearly all the respondents (96.6%, n = 87) were aware of the Bologna Process (figure 6.1). The majority of the respondents claimed that they are somewhat knowledgeable of the Bologna Process (figure 6.2). Just over half (52.9%, n = 46) stated it was 'very important' and only 2.3% (n = 2) stated that it was 'not important'. The respondents were asked to state if the Bologna Process had influenced changes in the organisation of the physiotherapy programmes in their department. More than half of the respondents (58.6%, n = 51) understood that the influence was 'to a large extent' (figure 6.3).

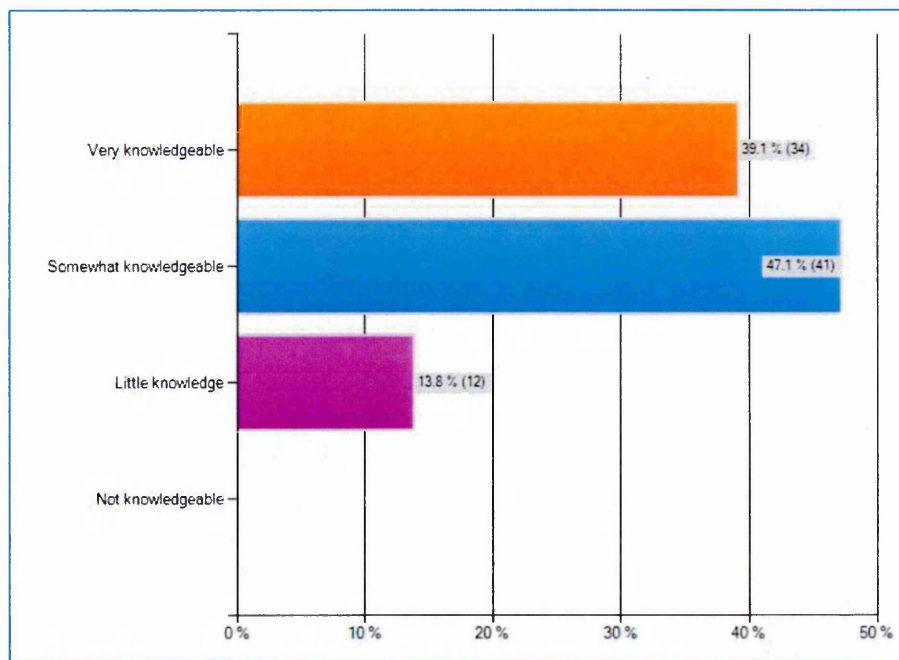


FIGURE 6.1: HEADS OF DEPARTMENTS' UNDERSTANDING OF THE BOLOGNA PROCESS (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

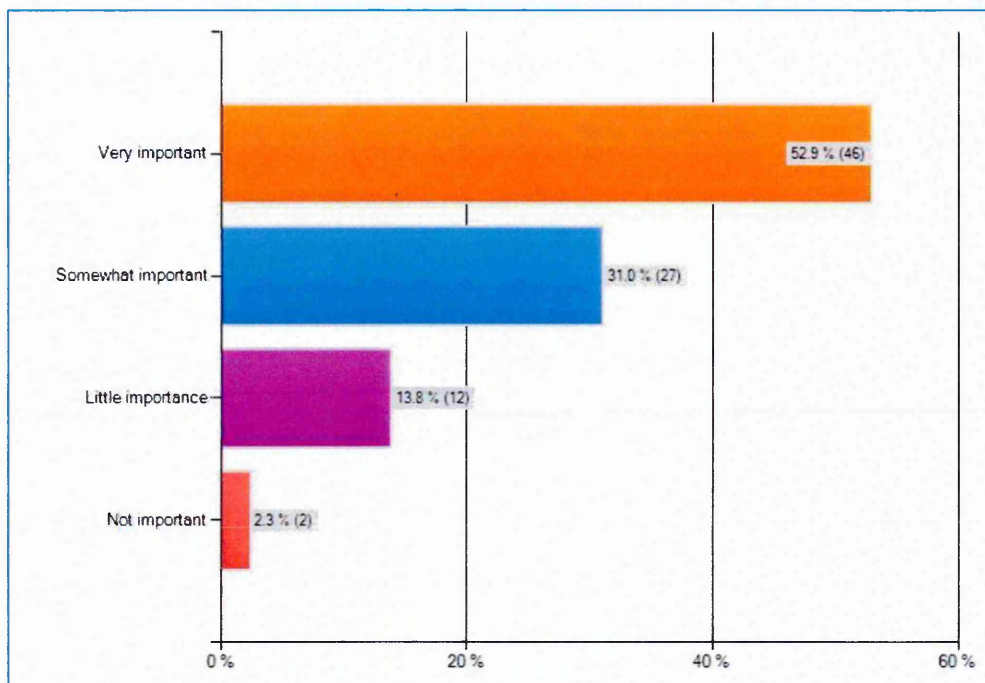


FIGURE 6.2: HEAD OF DEPARTMENTS' RATING ABOUT THE IMPORTANCE OF THE BOLOGNA PROCESS FOR THE ORGANISATION OF THE PHYSIOTHERAPY PROGRAMMES IN THEIR DEPARTMENTS (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

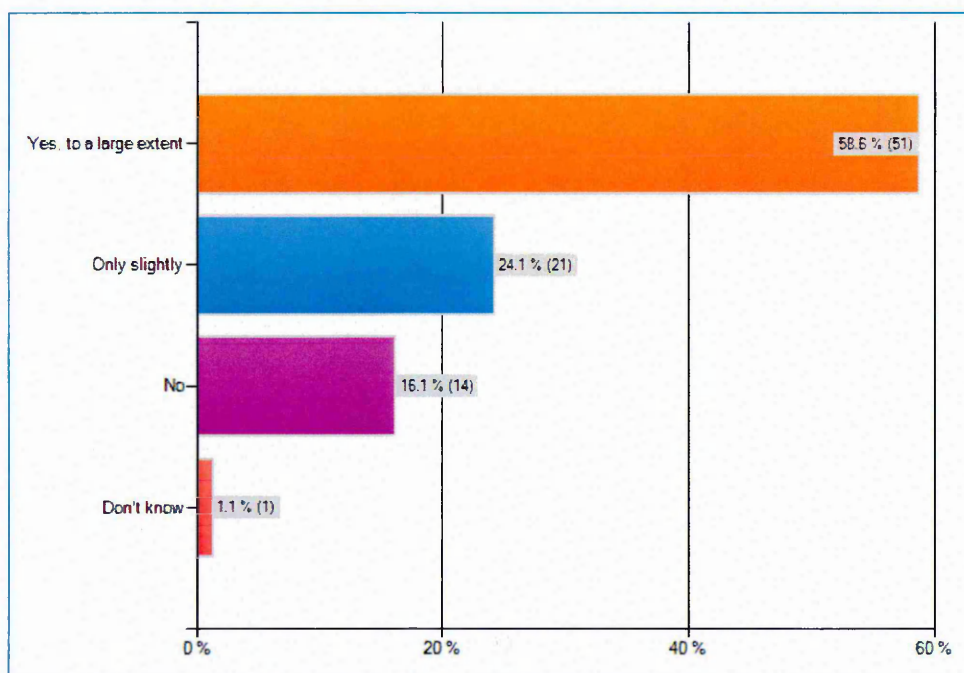


FIGURE 6.3: THE PERCEIVED INFLUENCE OF THE BOLOGNA PROCESS ON CHANGES IN THE ORGANISATION OF THE PHYSIOTHERAPY PROGRAMMES BY THE HEADS OF DEPARTMENTS (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



### **6.1.3 Findings on the general conditions of institutional governance**

Practically all the participants (98.9%, n = 89) declared that their institutions operated within the higher education sector of their respective national education systems and that most of them (83.5%, n = 76) formed part of the public education services. Nearly all the respondents (90.0%, n = 81) reported that their programmes were one amongst others in their faculty. 51.7% (n = 46) were members of the European Network of Physiotherapy in Higher Education.

### **6.1.4 Findings on the degrees and qualifications**

The first two objectives of the Bologna Declaration (1999) sought the commitment of the signatory states towards the adoption of a system of easily readable and comparable degrees and to establish a system based on two cycles (eventually extended to the three-cycle system). This section considers the extent of the implementation of the two cycles within physiotherapy education. It also reports on the tools used within the Bologna system that are the qualifications framework, the student centred approach and Diploma Supplement; and the recognition of qualifications.

#### **6.1.4.1 Implementation of the Bologna Structures**

- Degree structure and duration of programmes

There is no single model of first, second or third-cycle degrees in physiotherapy education across Europe. 98.9% (n = 90) of the respondents reported that their department offered a Bachelor degree programme of studies and just over 50% (n = 48) also offered a Master degree programme (figure 6.4). The duration of the Bachelor programme varies between 3 years (56.8%, n = 54), 3.5 years (9.4%, n = 9) or 4 years (30.6%, n = 29) (figure 6.5). The duration of the Master degree programme also varies between 2 years (65.9%, n = 31), 1.5 years (12.8%, n = 6) or 1 year (21.3%, n = 10) (figure 6.6). A third-cycle programme – the Doctoral degree was offered in just 20.9% (n = 19) of the institutions. The durations of the third cycle differed between institutions and also within institutions as different durations were reported also

within the same institution. On average these doctoral degrees lasted between 3 years (40.9%, n = 9), 4 years (40.9%, n = 9) or 6 years (18.2%, n = 4). All reported durations were in full time equivalent years.

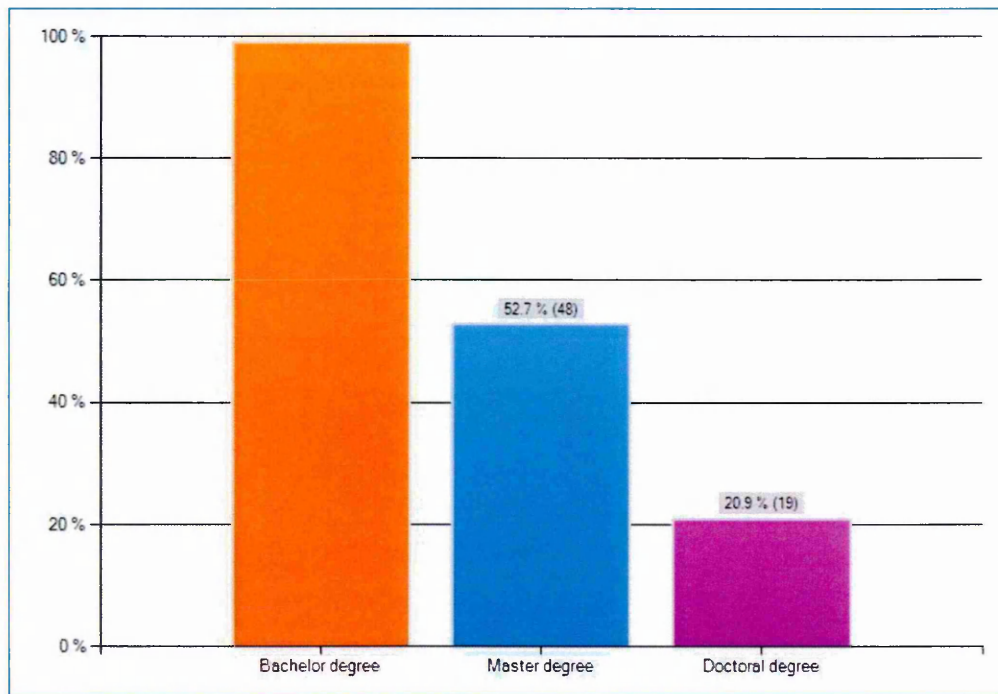


FIGURE 6.4: THE DISTRIBUTION OF BACHELOR, MASTER AND DOCTORAL DEGREE PROGRAMMES IN PHYSIOTHERAPY (THE VERTICAL AXIS REPRESENTS THE NUMBER OF SCHOOLS THAT OFFER THESE DEGREES)

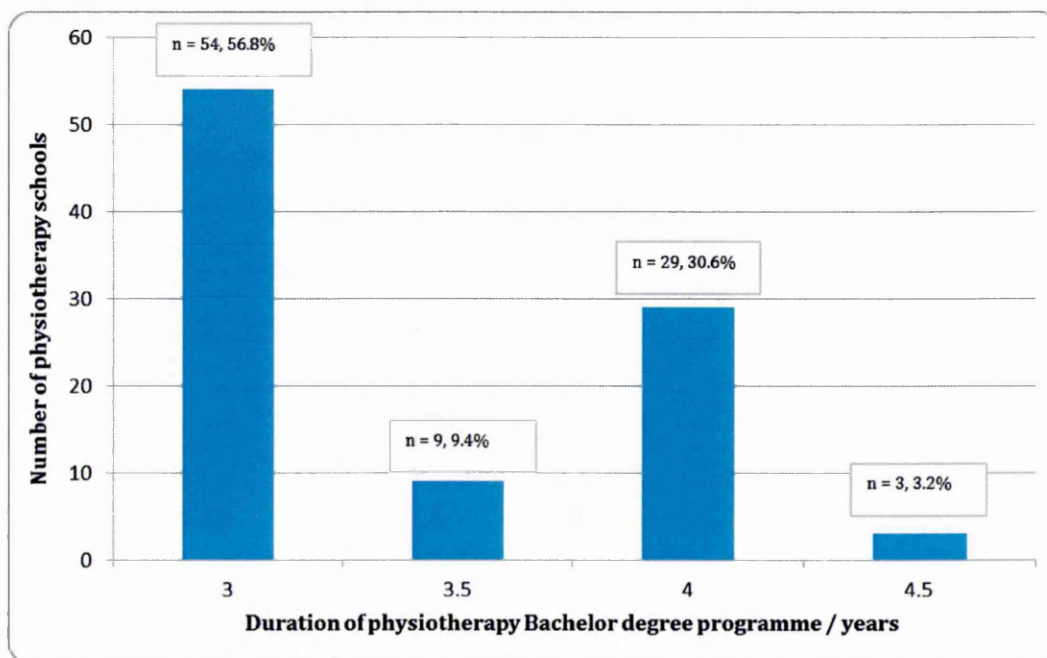


FIGURE 6.5: THE SPREAD DURATION OF BACHELOR DEGREE PROGRAMMES IN PHYSIOTHERAPY

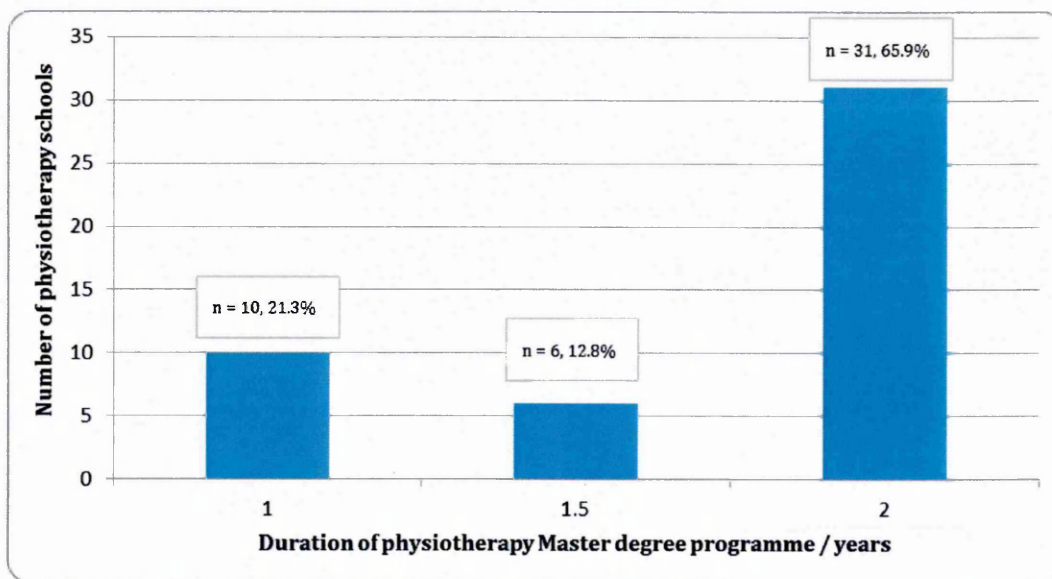


FIGURE 6.6: THE SPREAD DURATION OF MASTER DEGREE PROGRAMMES IN PHYSIOTHERAPY

- Typical student workload hours

The reported student workload in respect to the time recognised for each year of study at all levels shows that there is no single adopted model for physiotherapy education. The relative majority of programmes (34.5%,  $n = 30$ ) recognised the typical workload for the student to be between 1500 and 1600 hours of study for each year (see figure 6.7). As physiotherapy is an applied science that requires clinical practice, the heads of departments were also asked to indicate how many hours of clinical practice were assigned throughout the Bachelor programme. In 38.2% ( $n = 34$ ) of the programmes students dedicated between 1001 and 1200 hours but this also varied (see figure 6.8).

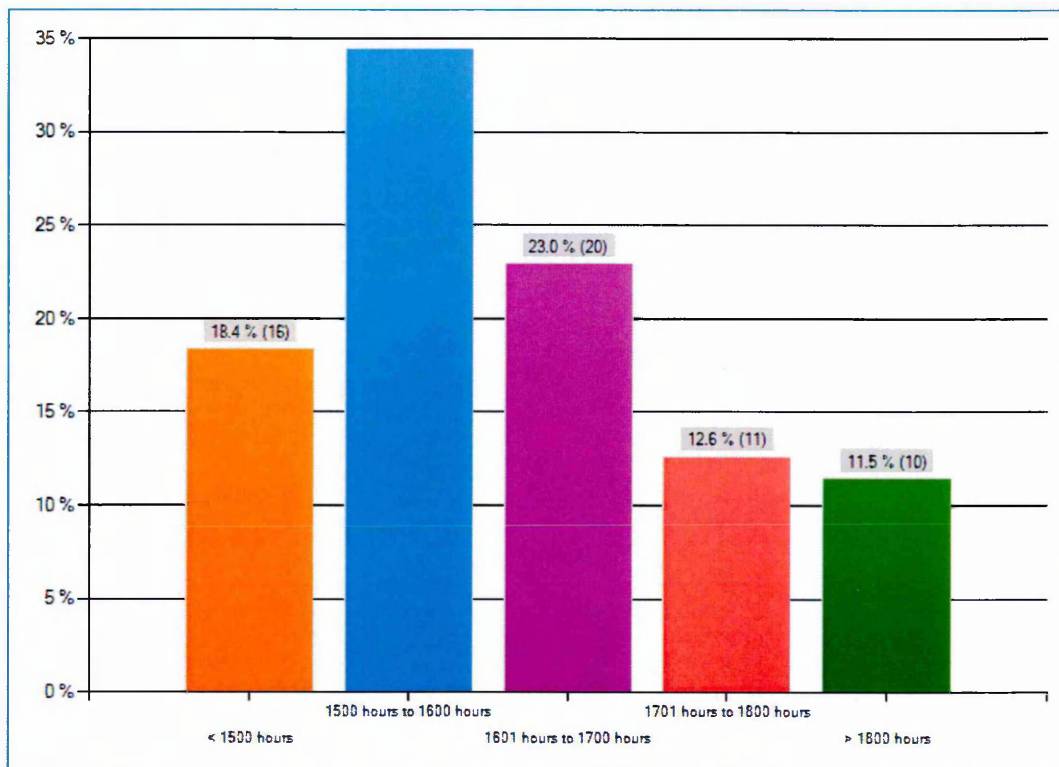


FIGURE 6.7: THE STUDENT WORKLOAD IN HOURS ACKNOWLEDGED FOR EACH YEAR OF STUDY (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

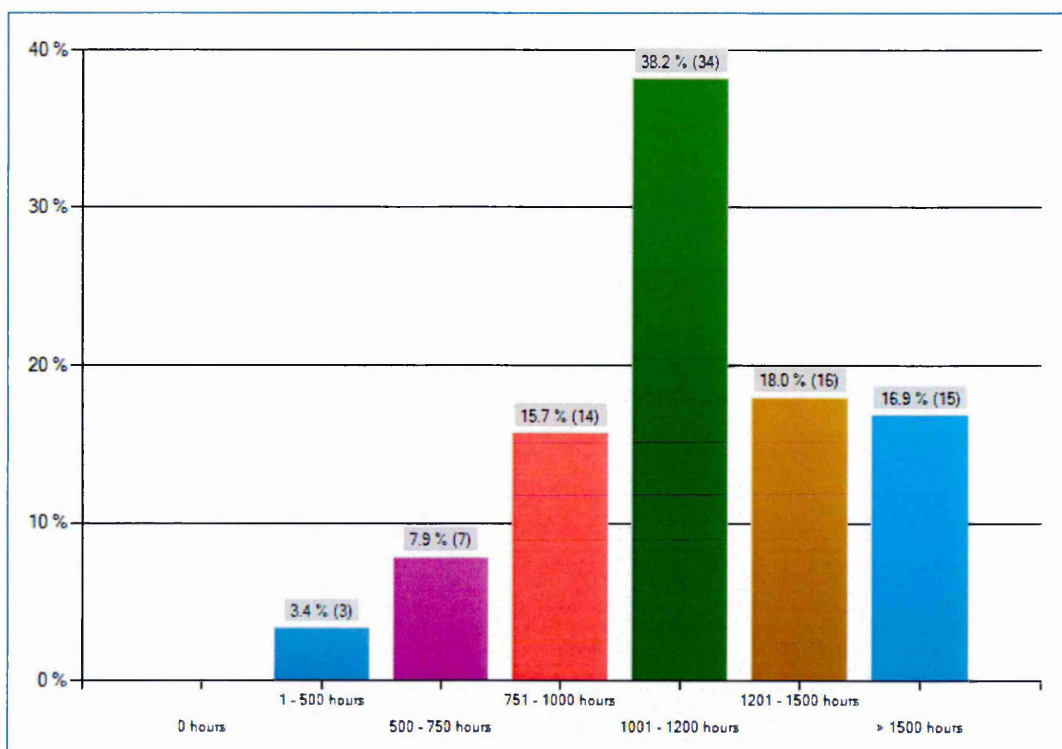


FIGURE 6.8: HOURS ASSIGNED FOR CLINICAL PRACTICE THROUGHOUT THE BACHELOR PROGRAMME (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

- Access from the first to the second cycle

In the Berlin communiqué (2003) the European ministers responsible for higher education indicated that the first cycle degree should give access to the second cycle. The heads of departments were asked if entry into a Master level (2nd cycle) within their institution was automatic following a Bachelor level (1st cycle) qualification. In physiotherapy this is not the case in more than half the programmes (figure 6.9). The respondents were asked to indicate the reasons as to why access was not automatic. A text analysis was carried out and revealed that access to the second cycle also required work experience (22.2%, n = 8); an entry examination (19.4% n = 7); and equalisation programmes necessary to address the difference between academic and professional degree programmes (11.1% n = 4). Several other reasons were mentioned such as the absence of master programmes, other criteria and the undergraduate performance.

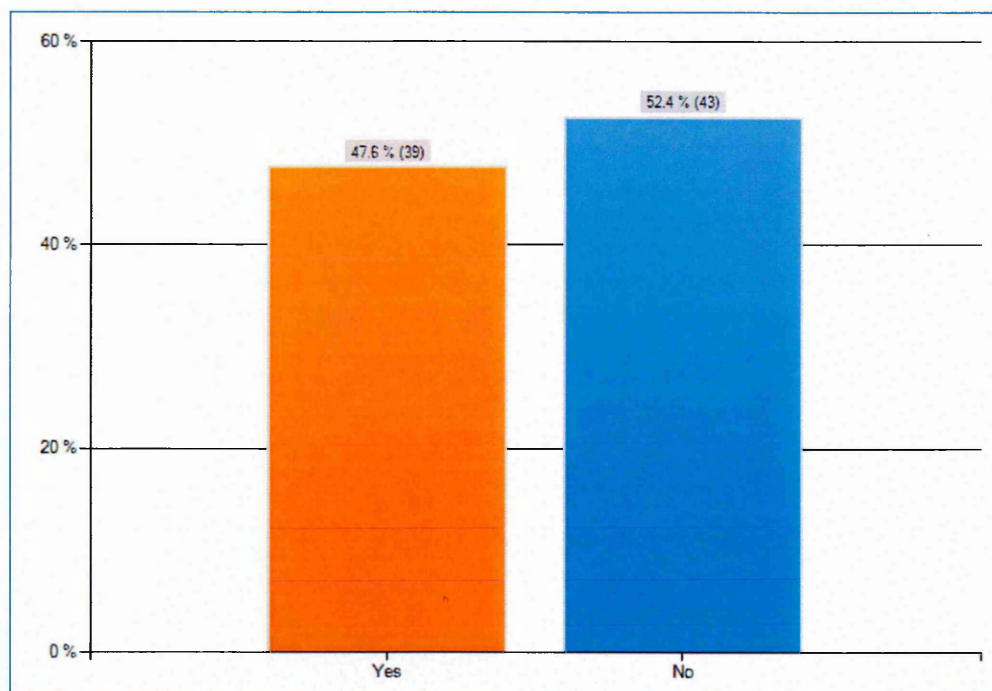


FIGURE 6.9: DIRECT ACCESS TO A SECOND CYCLE DEGREE IN PHYSIOTHERAPY (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



- Joint degrees and programmes

The sixth objective of the Bologna Declaration aims at promoting the necessary European dimension in higher education. The 2001 Prague communiqué specifically addressed this issue calling for an increased partnership in the curricular process and also leading to recognition of joint degrees. Heads of departments were asked to provide information related to this. The enrolment of foreign nationals onto physiotherapy degree courses was particularly more prevalent for persons within the European Union (EU) (figure 6.10). Less prevalent was the enrolment of teachers from other countries, including from Europe (see figure 6.11). Whilst the departments' appear to be well represented at a national level with the scope of fostering policy dialogue in higher education, they are less so on a European or global level (see figure 6.12) and physiotherapy students are even less represented (see figure 6.13). Notwithstanding the elapse of ten years since the Prague communiqué, just 33.7% (n = 29) and 39.3% (n = 33) of physiotherapy institutions cooperate with others on joint degrees and programmes respectively (see figure 6.14).

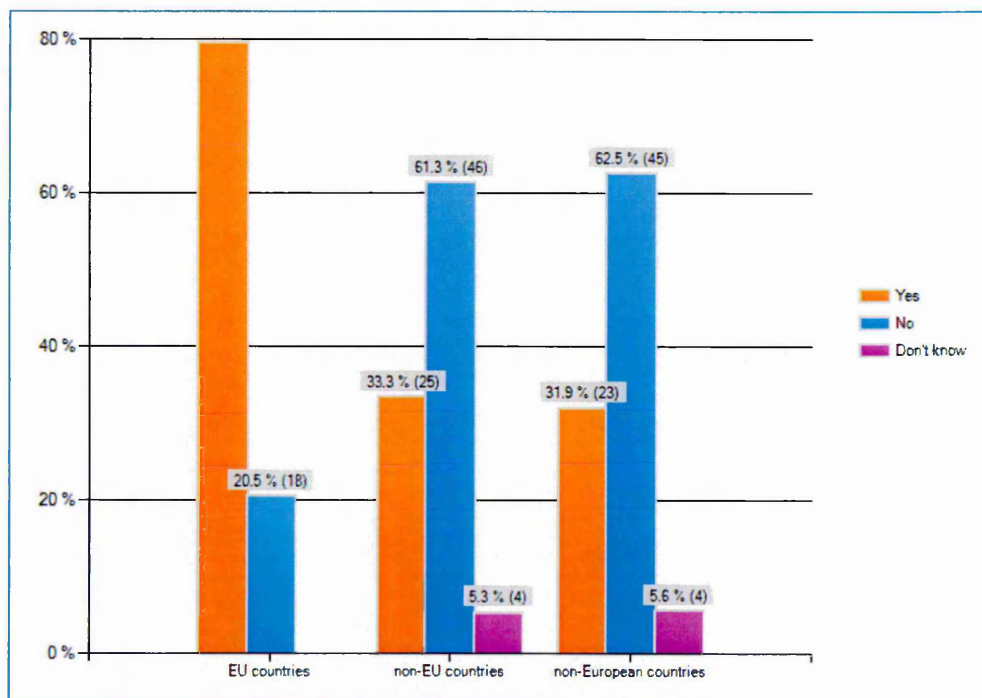


FIGURE 6.10: THE ENROLMENT OF FOREIGN STUDENTS ON PHYSIOTHERAPY PROGRAMMES (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

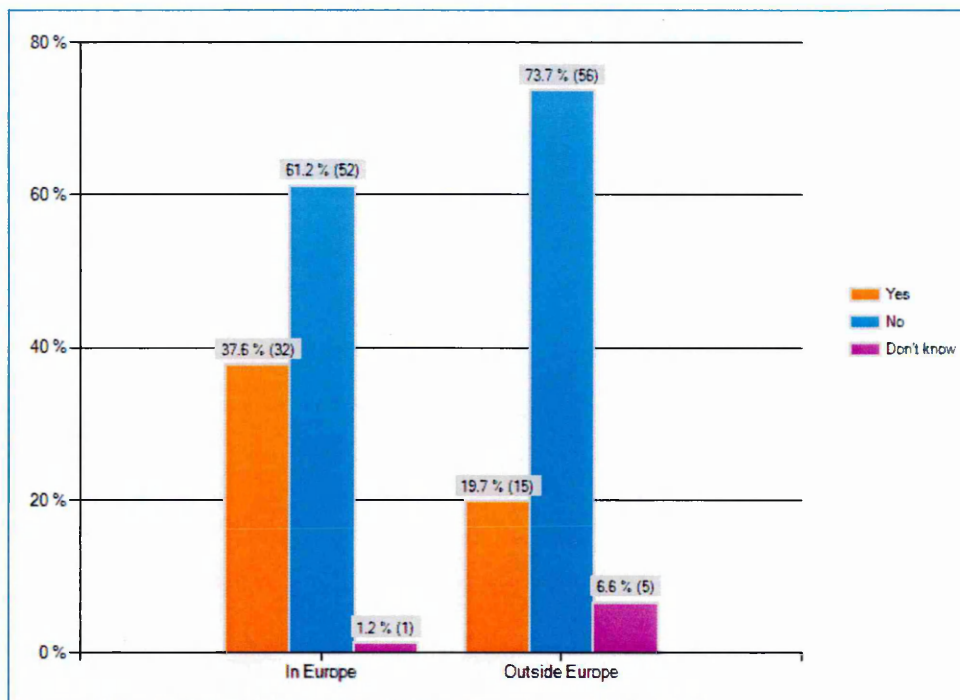


FIGURE 6.11: THE ENROLMENT OF FOREIGN LECTURERS ON PHYSIOTHERAPY PROGRAMMES (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

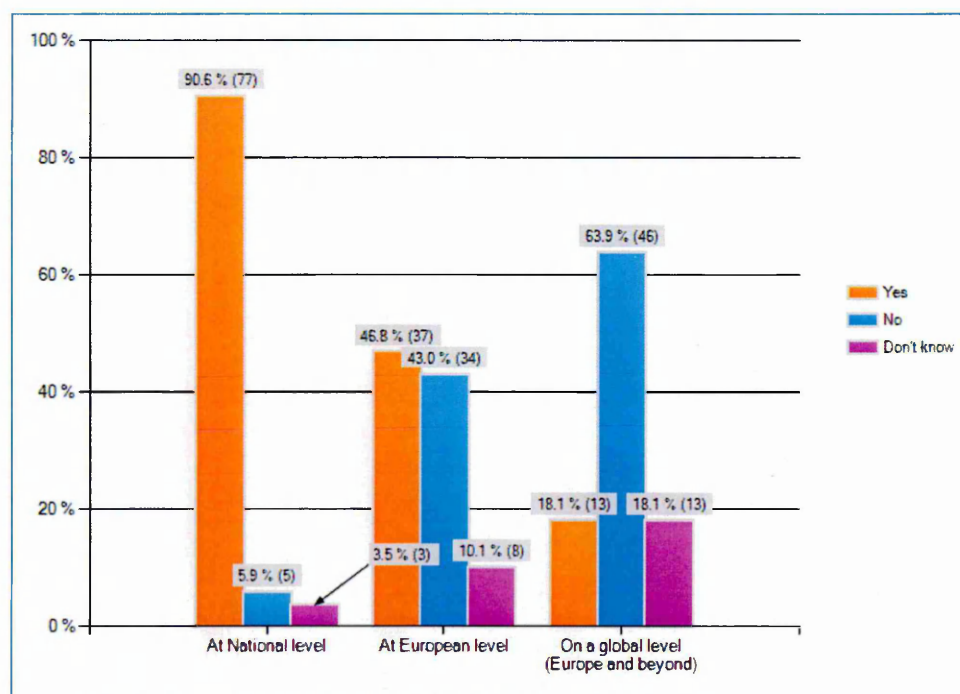


FIGURE 6.12: DEPARTMENTAL REPRESENTATION IN THE PROMOTION OF POLICY DIALOGUE (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

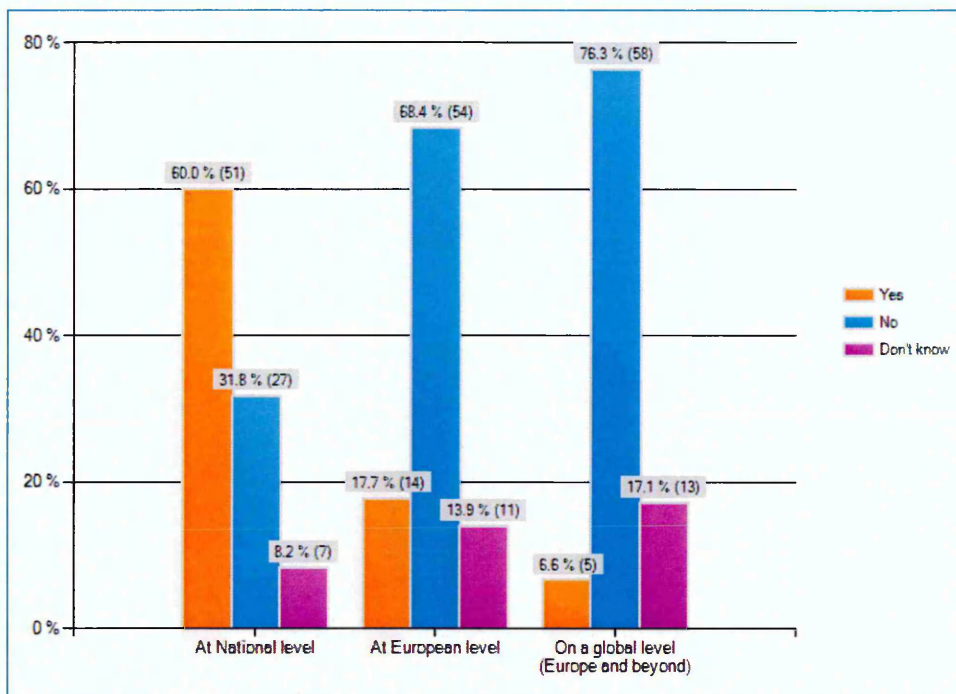


FIGURE 6.13: STUDENT REPRESENTATION IN THE PROMOTION OF POLICY DIALOGUE (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

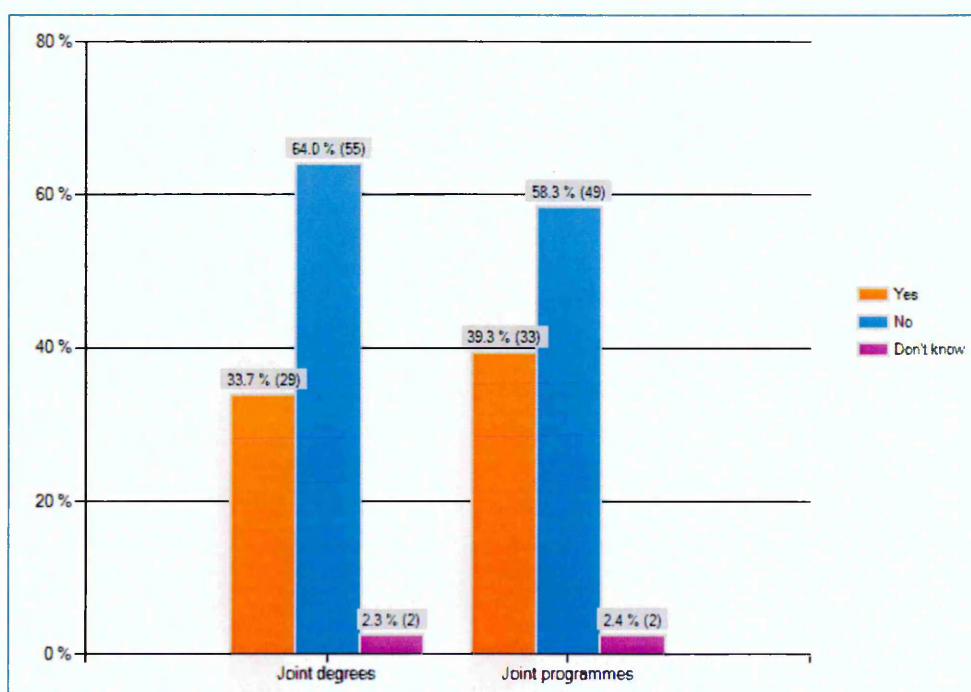


FIGURE 6.14: COOPERATION BETWEEN DIFFERENT PHYSIOTHERAPY INSTITUTIONS ON JOINT DEGREES AND PROGRAMMES (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

#### 6.1.4.2 Implementation of the Bologna tools

Three tools were adopted to increase the transparency of the Bologna Process. Heads of departments were asked to provide information related to these tools that are the establishment of a qualifications framework, student-centred approaches and the Diploma Supplement.

- Qualifications framework

The qualifications framework intended to make higher educational systems more transparent by providing common reference points for the different levels of qualifications. This survey sought to discover whether physiotherapy programmes were following a qualifications framework and if so which one. Interestingly 29.2% (n = 26) of the respondents did not know the answer; 55.1% (n = 49) of programmes are linked to the European Qualifications Framework (EQF) whilst 15.7% (n = 14) to a different one (see figure 6.15).

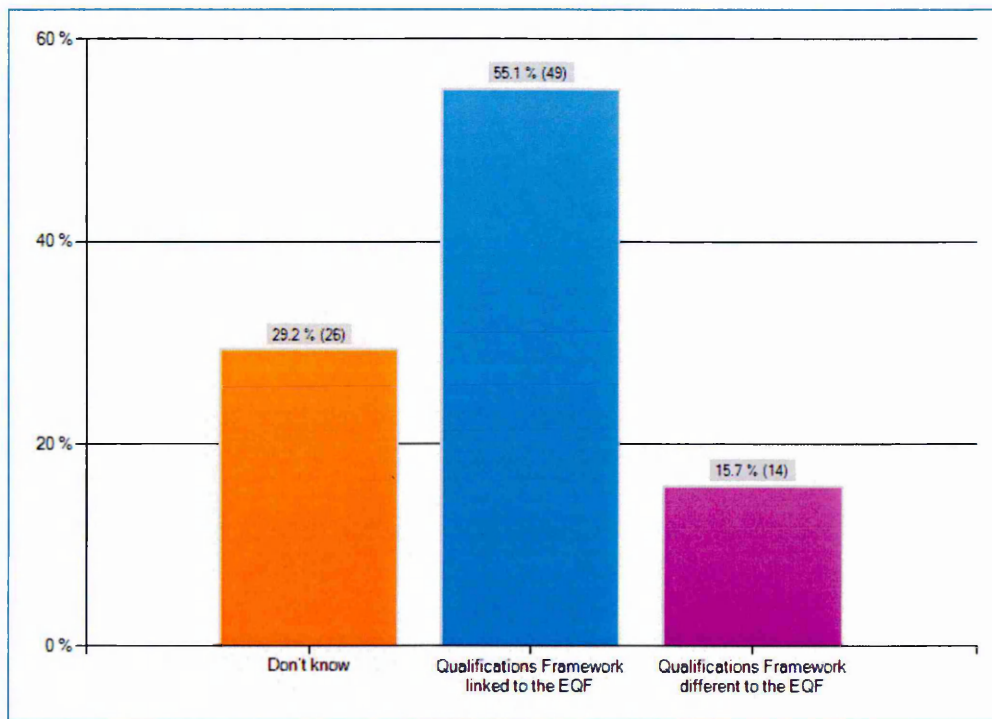


FIGURE 6.15: ADHERENCE TO A QUALIFICATIONS FRAMEWORK (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



- Student-centred approaches

Student-centred approaches aim to facilitate the learning experience of the student and within this context the Bologna Process adopts the tools of the ECTS, learning outcomes and student-centred learning. 84.5% (n = 71) of the heads of departments reported that they had implemented the ECTS for their programmes (see figure 6.16). There is no single model adopted. The relative majority of programmes (31.0%, n = 26) have assigned 25 hours for one ECTS. Again it is necessary to note that 16.7% (n = 14) of the respondents were not sure about the value (see figure 6.17).

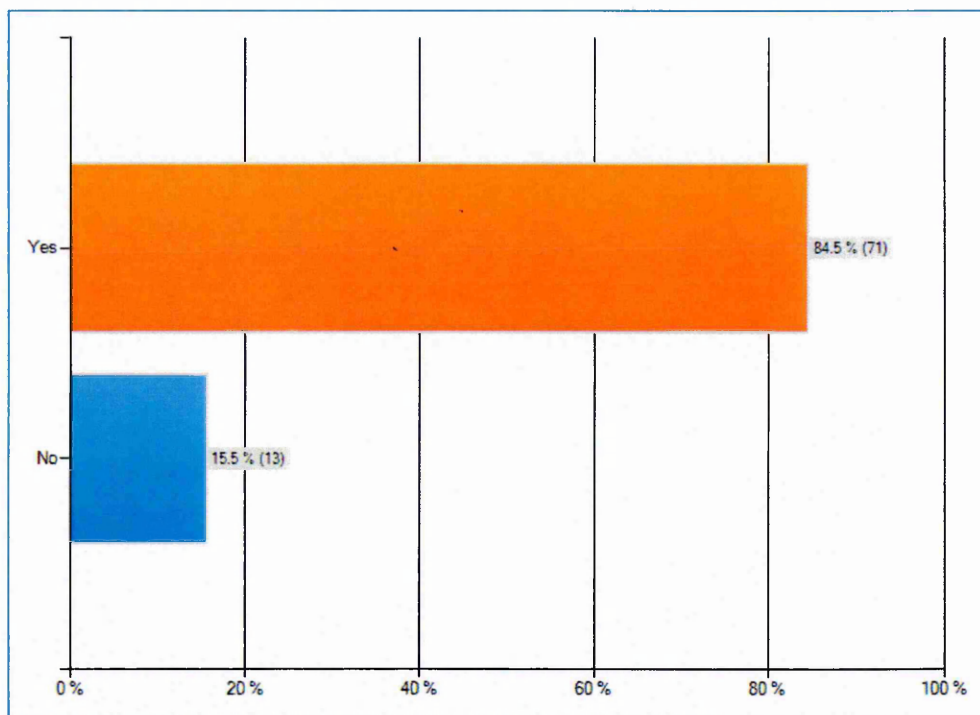


FIGURE 6.16: THE IMPLEMENTATION OF THE ECTS WITHIN PHYSIOTHERAPY PROGRAMMES (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



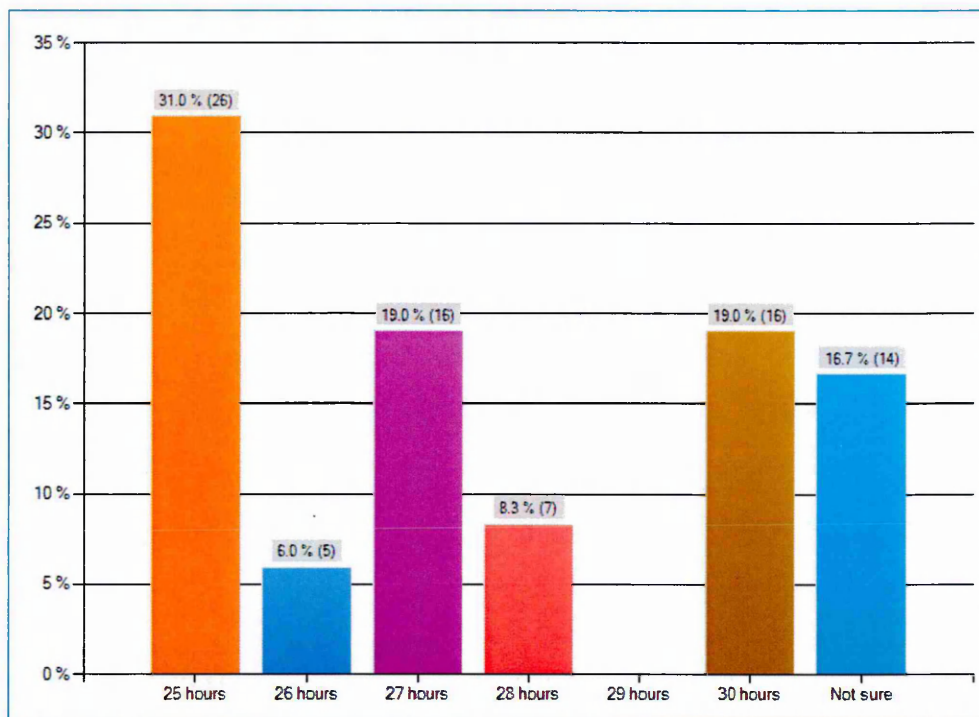


FIGURE 6.17: THE VALUE OF 1 ECTS IN HOURS (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

Credits were not allocated solely on the basis of contact hours (see figure 6.18); the majority of the respondents also reported that the learning outcomes are specified for their programmes (see figure 6.19). This is noted positively as learning outcomes are closely linked to the ECTS; however the description of the learning outcomes was not asked for.

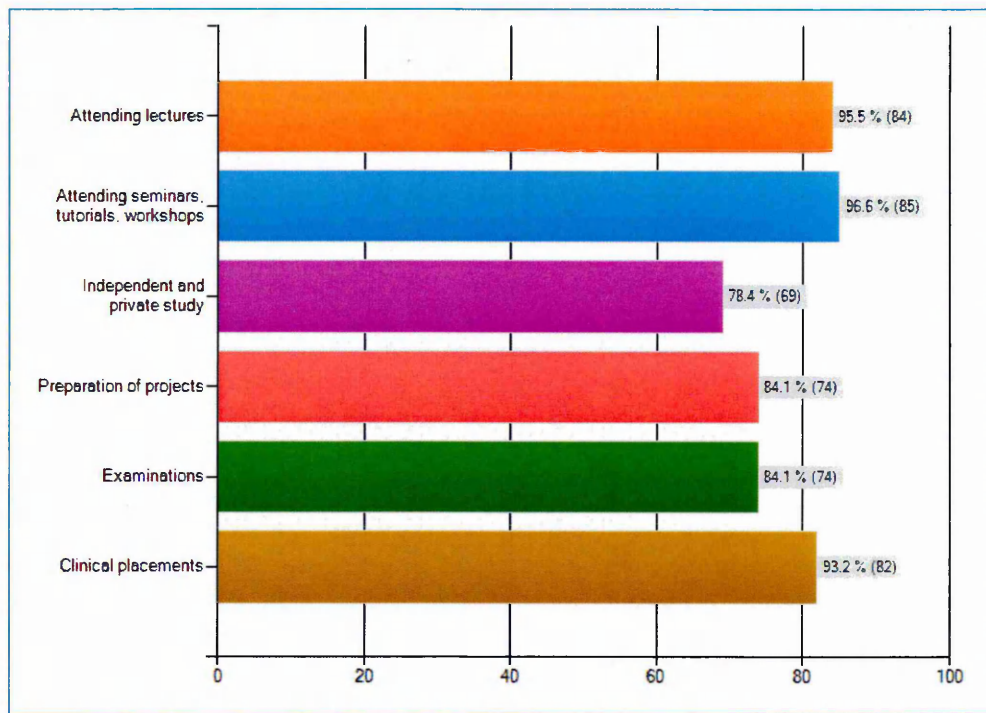


FIGURE 6.18: LEARNING ACTIVITIES THAT ARE INCLUDED IN THE COMPUTATION OF STUDENT WORKLOAD (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

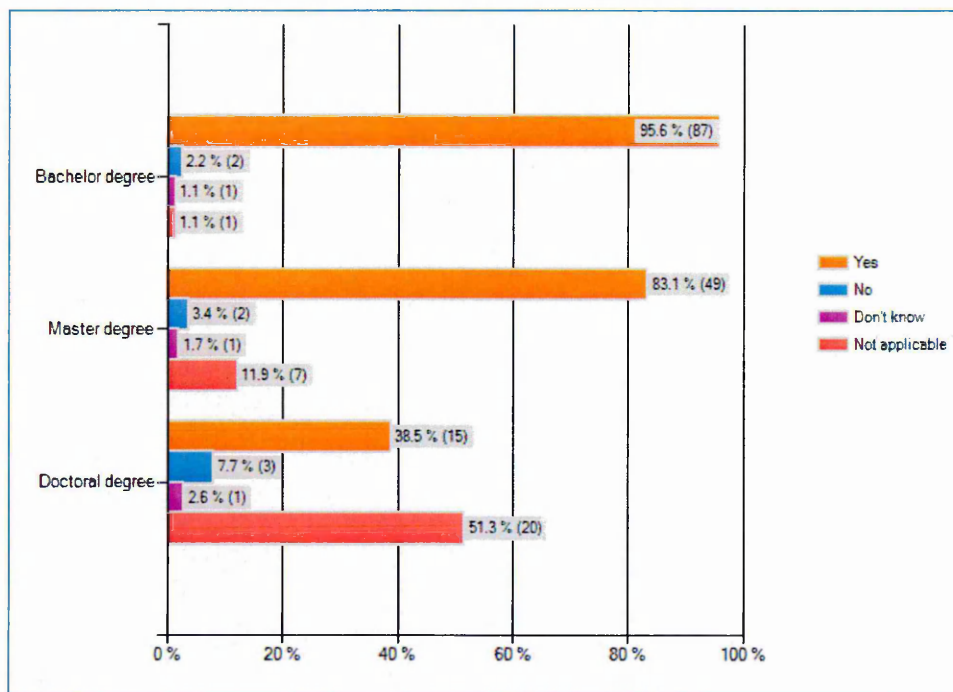


FIGURE 6.19: THE SPECIFICATION OF LEARNING OUTCOMES FOR DEGREE PROGRAMMES (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

- The Diploma Supplement

The last of the Bologna tools is the Diploma Supplement that is intended to provide information about the student's achievements with explanations of the institutions' degree structure and other backgrounds. Heads of departments were asked to indicate their institutions' practice of awarding the Diploma Supplement. 71.6% (n = 63) indicated that their institution awarded the successful graduates with a Diploma Supplement and 8.0% (n = 7) also awarded the Diploma Supplement to students who did not complete their studies. 10.2% (n = 9) did not award a Diploma Supplement (figure 6.20).

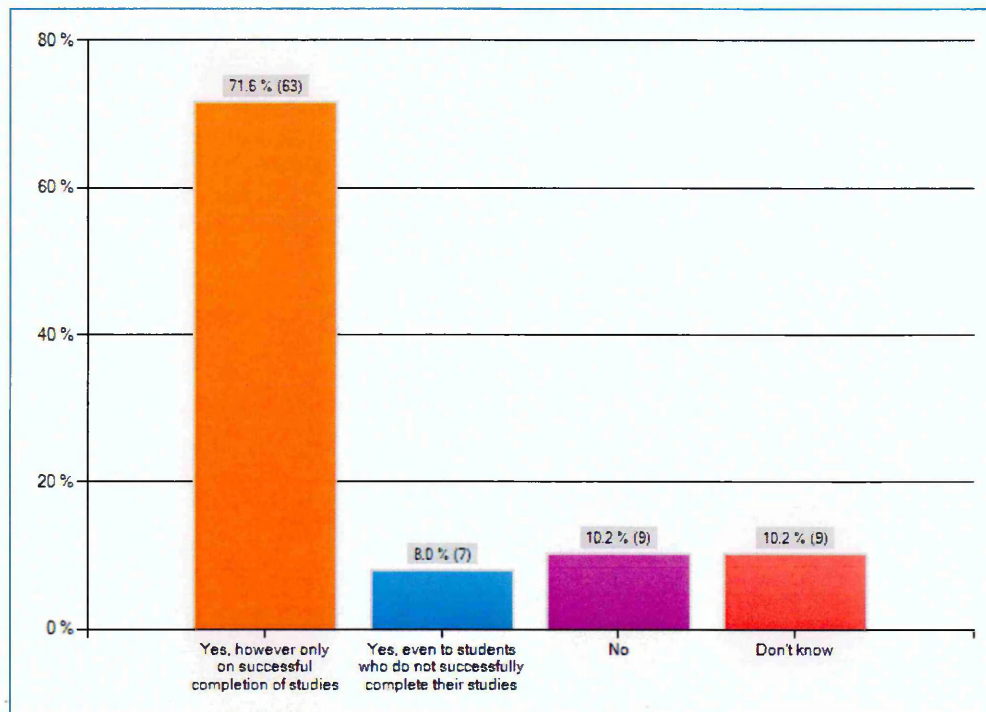


FIGURE 6.20: AWARDING OF THE DIPLOMA SUPPLEMENT (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

### **6.1.4.3 Recognition of the qualifications**

Recognition is a core goal of the Bologna Process particularly aimed to facilitate the fair recognition of foreign degrees/qualifications and study periods abroad. This survey did not assess the departmental responsibility levels in recognising, or otherwise, the foreign degrees. Heads of departments were however asked whether the degrees obtained from their institution were sufficient to serve as an entry requirement to practice the physiotherapy profession in their country. Four individual respondents from Germany, Slovenia, Montenegro and Norway reported that their students required a period of internship and four respondents, all from Belgium, reported that the entry level into the profession is at a Master level. Otherwise all other Bachelor programmes permitted entry into the profession.

### **6.1.5 Findings on quality assurance**

Quality assurance was developed through the fifth objective of the Bologna Declaration in its own right. Hence from the very beginning there has been the strong attention on quality in the development of comparable and compatible degrees across the EHEA. The heads of departments were surveyed with particular intention to discover if they followed the European Standards and Guidelines for Quality Assurance (ESG) and how they implemented quality assurance practices. The results reveal that 44.4% (n = 40) reported that their departments follow the ESG and whilst 23.3% (n = 21) did not, a further 32.3% (n = 29) did not know (see figure 6.21). 95.6% (n = 86) engaged in internal quality assurance practices and 80.9% (n = 72) engaged in external quality assurance practices. 62.6% (n = 57) publish their audit reports (figure 6.22). 94.6% (n = 85) of the institutions, students are also reported to be involved in quality assurance evaluation (figure 6.23).



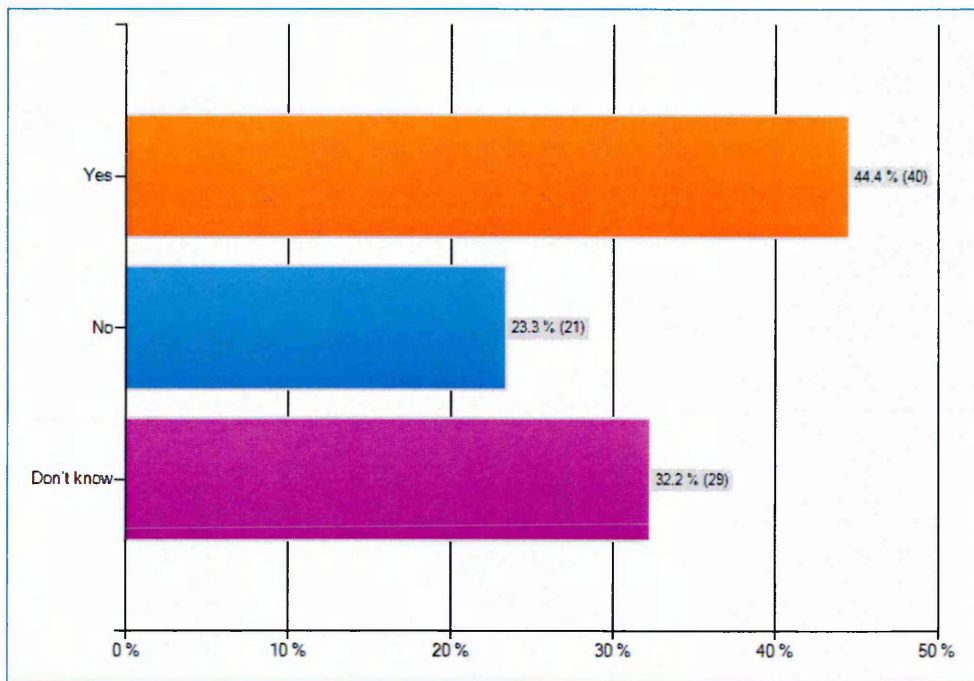


FIGURE 6.21: ADHERENCE TO THE EUROPEAN STANDARDS AND GUIDELINES FOR QUALITY ASSURANCE (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

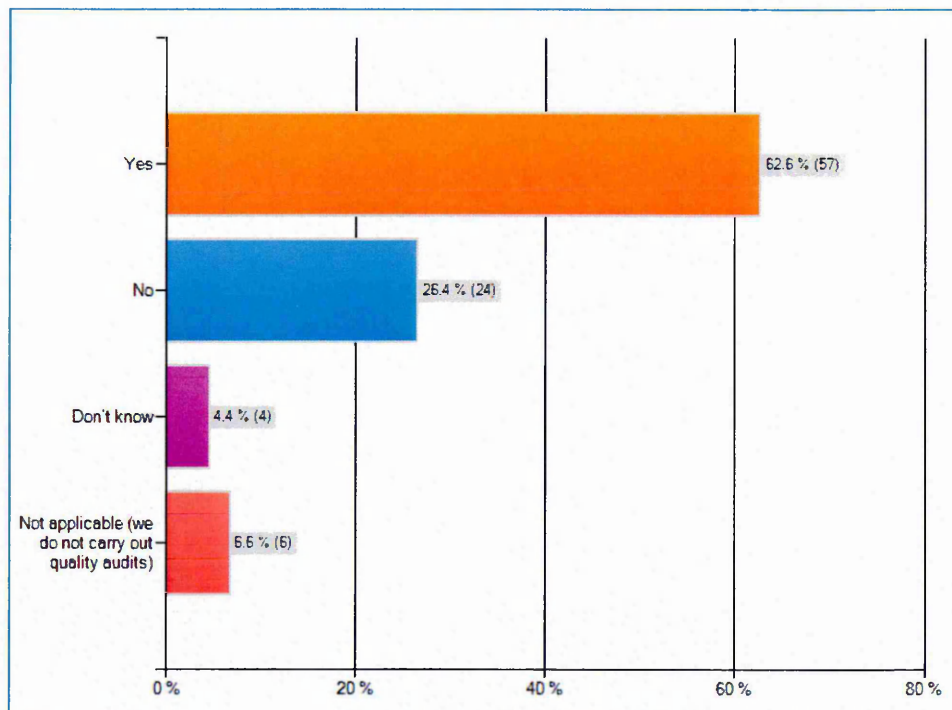


FIGURE 6.22: PUBLICATION OF AUDITS ON QUALITY (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



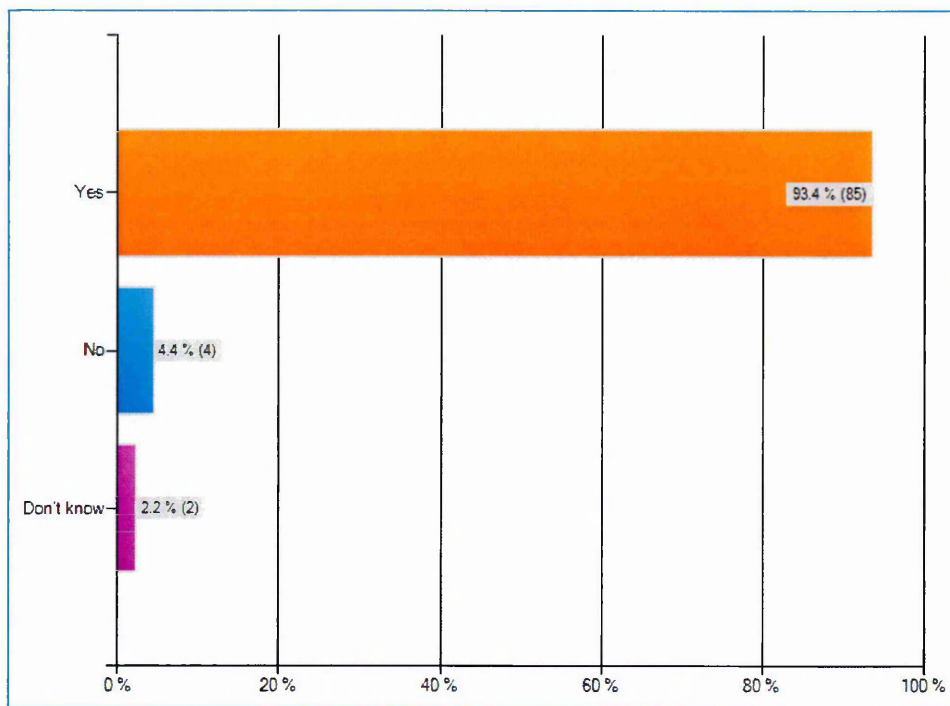


FIGURE 6.23: STUDENT INVOLVEMENT IN QUALITY ASSURANCE EVALUATIONS (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

### 6.1.6 Findings on the social dimensions

The social dimension of the Bologna Process emerged after the Declaration of 1999 gaining prominence following the 2003 and 2005 communiqués. These social dimensions addressed the need to remove barriers of accessibility to higher education.

- Routes and pathways

The social dimensions were taken to include the minimum education levels necessary to start a physiotherapy degree, the presence of a *numerus clausus* and also the option of flexible learning pathways. The relative majority of programmes are open following a minimum of 12 years of cumulative primary and secondary education (43.8% n = 9); in a substantial number (n = 27, 30.3%) this is 13 years (figure 6.24).

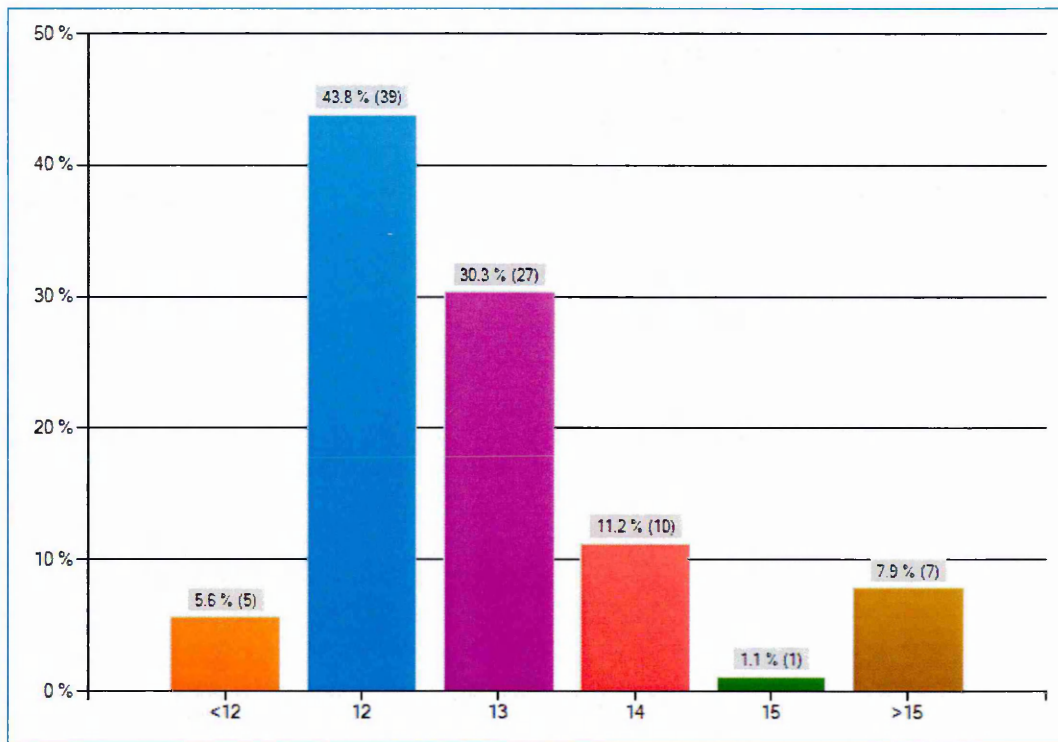


FIGURE 6.24: THE NUMBER OF YEARS OF OBLIGATORY EDUCATION (EXCL. KINDERGARTEN) REQUIRED BEFORE ENTERING A BACHELOR DEGREE PROGRAMME IN PHYSIOTHERAPY (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

Nearly all programmes have a fixed admission number (92.1%  $n = 82$ ) onto the Bachelor programme. This number varies between 15 students and 325 students; the relative majority (29.7%  $n = 11$ ) take 60 students onto each programme. Collectively these 82 heads of departments reported to admit 5013 students into their programmes each year. The possibilities of flexible learning pathways such as part-time studies, including also study breaks, show no common trend (figure 6.25).

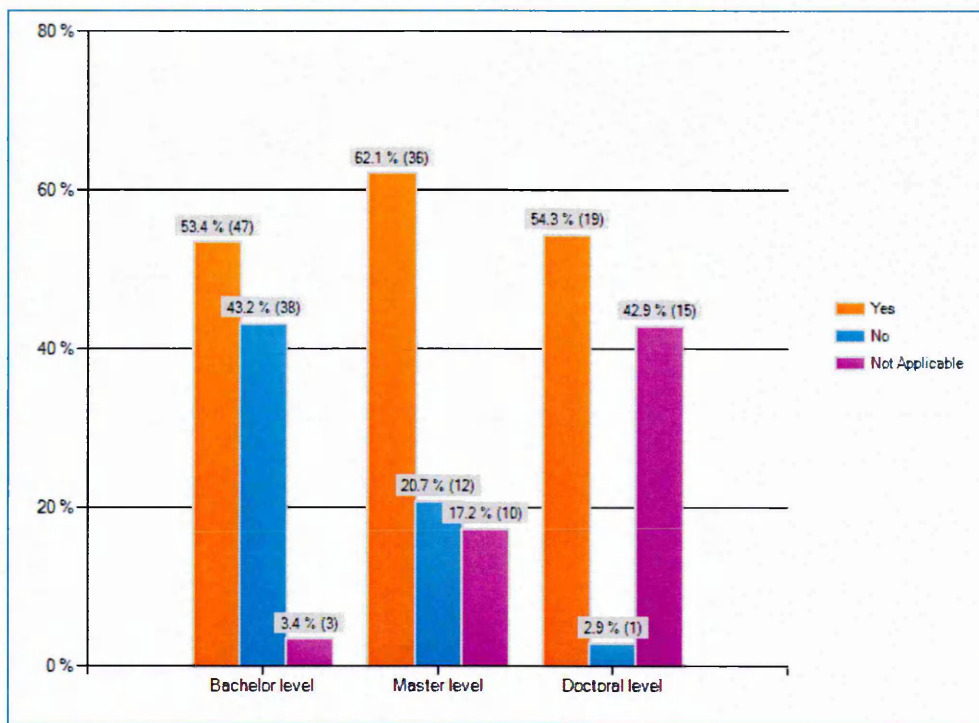


FIGURE 6.25: OPPORTUNITIES OF FLEXIBLE LEARNING AT DIFFERENT LEVELS (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

- Fees and financial support

This section aims to report on the tuition fees that a student typically pays in order to complete a Bachelor degree in physiotherapy. It did not assess the financial support in terms of access to loans, grants and/or tax benefits but was limited to the tuition fees. The approximate tuition fees to complete a Bachelor level programme in physiotherapy is reported to be between €1,000 and €5,000 in 24.4% (n = 21) and free in 37.2% (n = 32); in 4.7% (n = 4) of the reported circumstances the students actually receive a stipend in addition to free education (see figure 6.26).

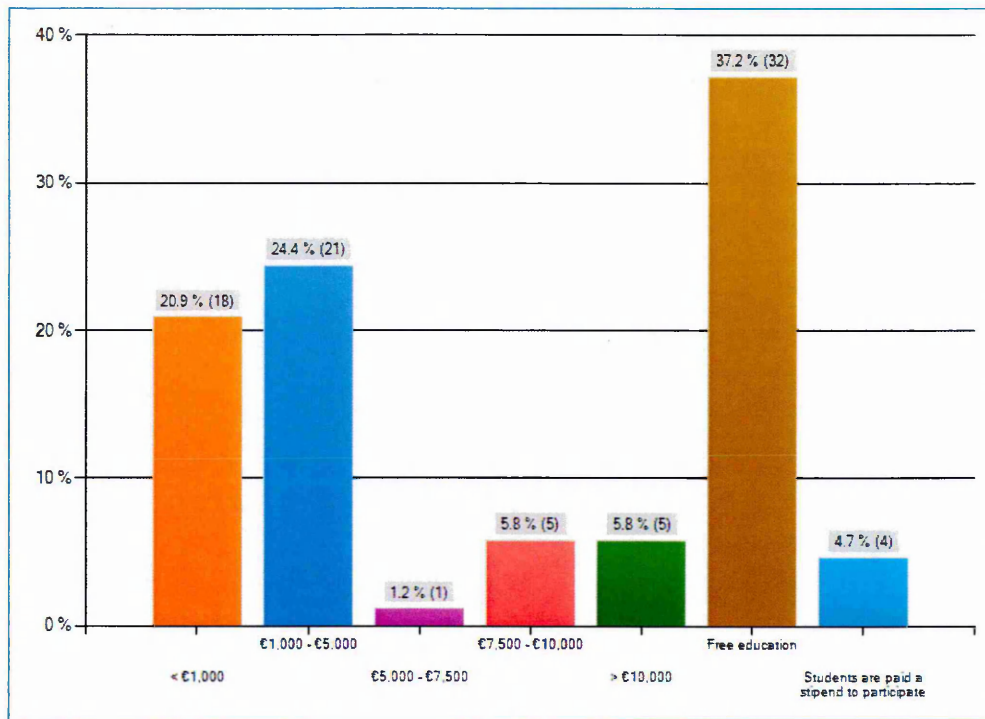


FIGURE 6.26: TUITION FEES TO COMPLETE A BACHELOR DEGREE IN PHYSIOTHERAPY (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

- Research posts

The final question in this section sought to discover if doctoral students were also considered to be employed by the institution as early-stage researchers thus benefiting from salary and social security/pension rights. This is only possible in 29.1% (n = 25) of institutions; 10.5% of the respondents did not know the answer to this (see figure 6.27).

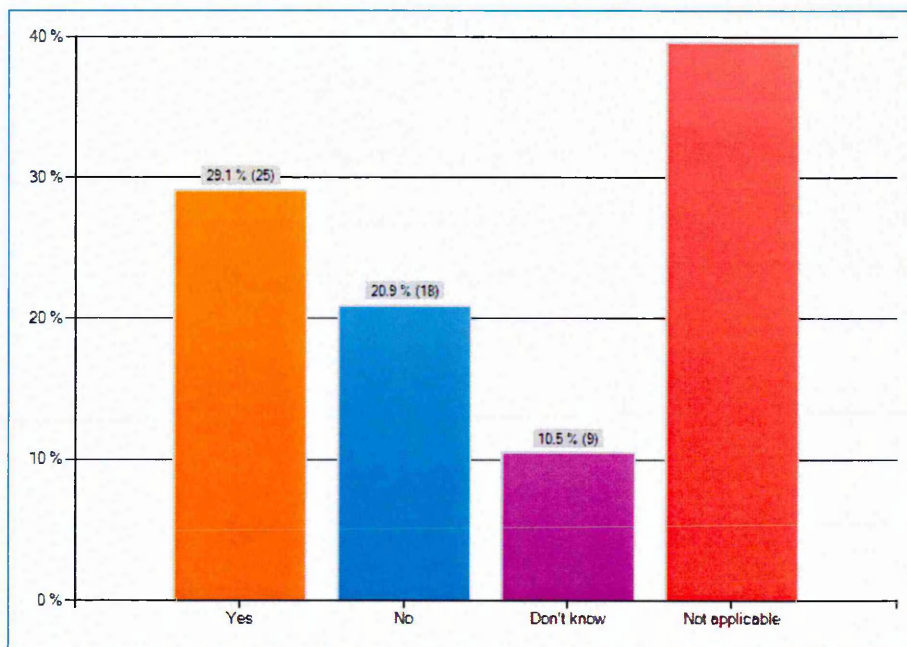


FIGURE 6.27: OPPORTUNITIES FOR DOCTORAL CANDIDATES TO BE EMPLOYED AS EARLY-STAGE RESEARCHERS BENEFITTING FROM SALARY AND SOCIAL SECURITY/PENSION RIGHTS (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

### 6.1.7 Findings on the effective outcomes and employability

The Bologna Process considered employability with a certain importance even creating a working group dedicated to employability issues. Employability is a measure of the efficacy of higher education together with attainment and completion rates (Eurostat and Eurostudent 2009). The Leuven/Louvain-la-Neuve communiqué in 2009 stressed the importance for work placements and on-the-job training to be included in higher education. The survey questionnaire sought to discover the number of hours that a student typically spends on clinical practice and has reported this earlier on in connection with the workload for student (figure 6.8). In addition, the heads of departments were asked to indicate in which areas their students were most likely to find employment and what support was provided by the institution at the end of the study period. Just over half the students (54.3%) would appear to find employment in public institutions (figure 6.28).



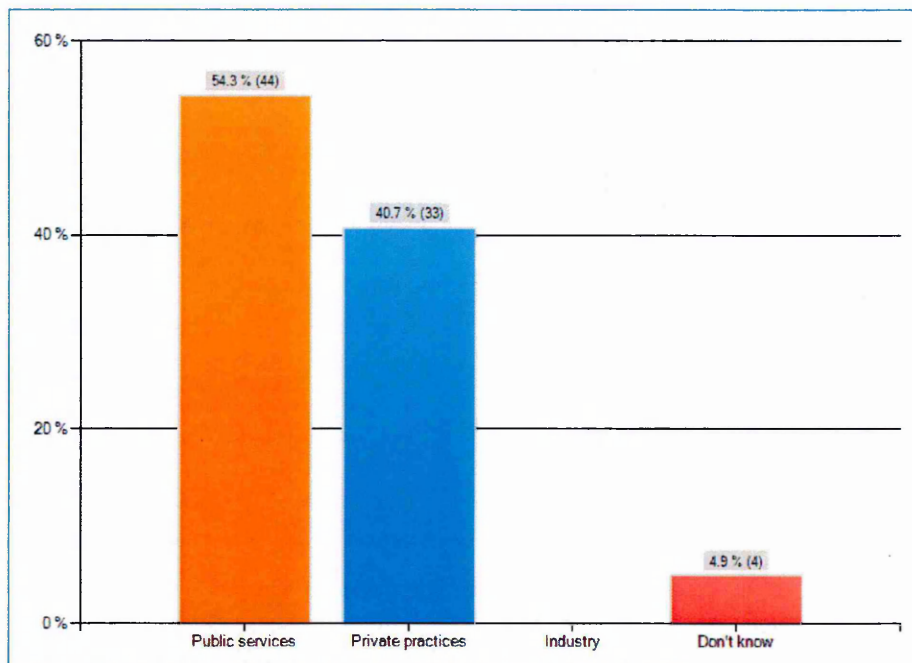


FIGURE 6.28: EMPLOYMENT OPPORTUNITIES FOR NEWLY GRADUATED PHYSIOTHERAPISTS (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

In most circumstances information on employment is provided by the majority of institutions (figure 6.29).

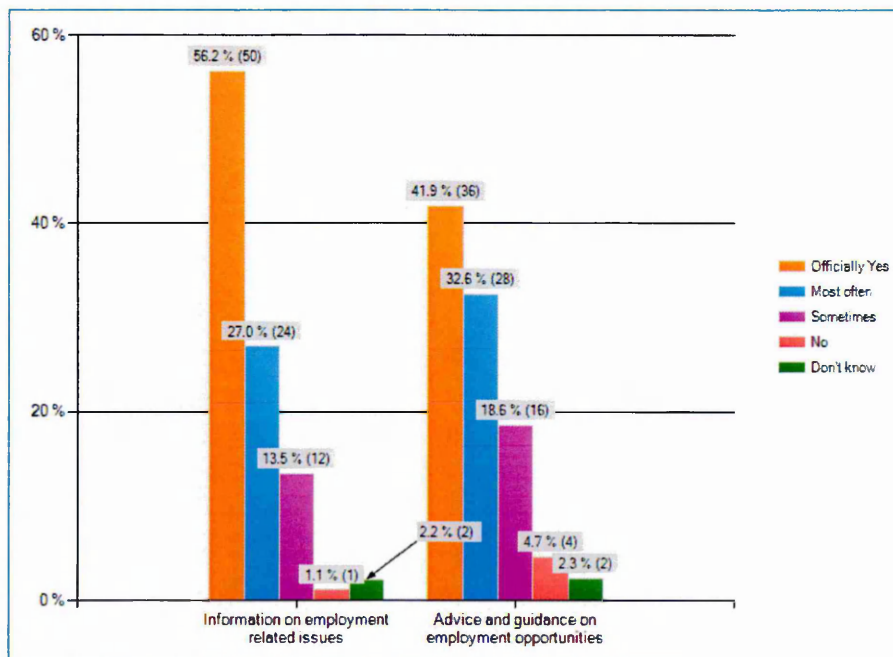


FIGURE 6.29: EMPLOYMENT RELATED SUPPORT SERVICES OFFERED TO STUDENTS (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

### 6.1.8 Findings on lifelong learning

The emphasis on lifelong learning was extended following the 2001 Prague communiqué, just two years after the Bologna Declaration and was listed as a seventh objective. It gained momentum after 2008 with the publication of the European Universities' Association (EUA) Charter on lifelong learning but remained poorly understood especially due the omission of a clear definition on what constitutes lifelong learning (Smidt and Sursock 2011). The survey aimed to explore whether institutions for physiotherapy education also deliver lifelong learning activities in the form of continuing education and if they have official ties with other entities in this regard (see figures 6.30 and 6.31). The flexible delivery of programmes, which is another understanding of lifelong learning, was addressed in the context of the social dimensions (refer to figure 6.25).

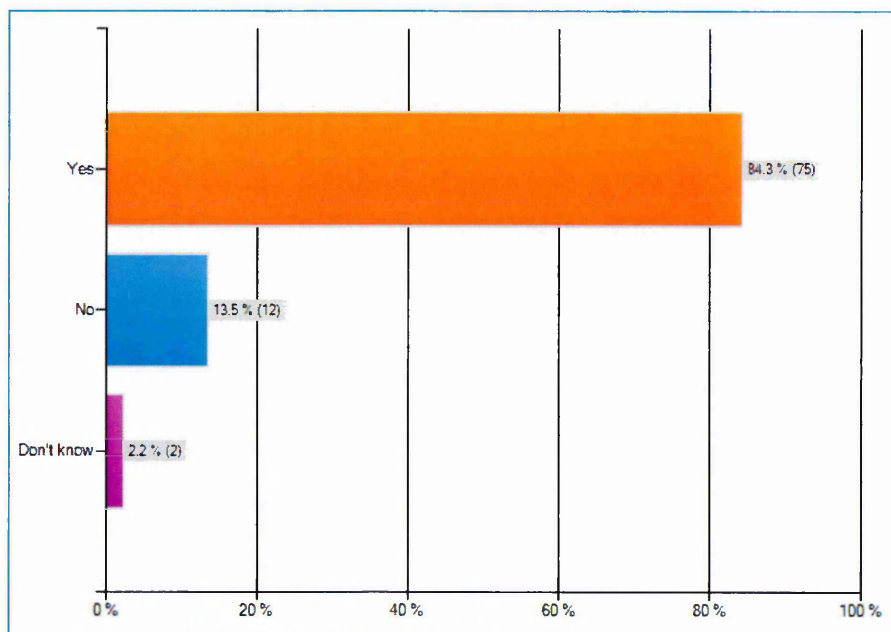


FIGURE 6.30: ORGANISATION OF LIFELONG LEARNING ACTIVITIES SUCH AS CONTINUING EDUCATION AND CONTINUED PROFESSIONAL DEVELOPMENT (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

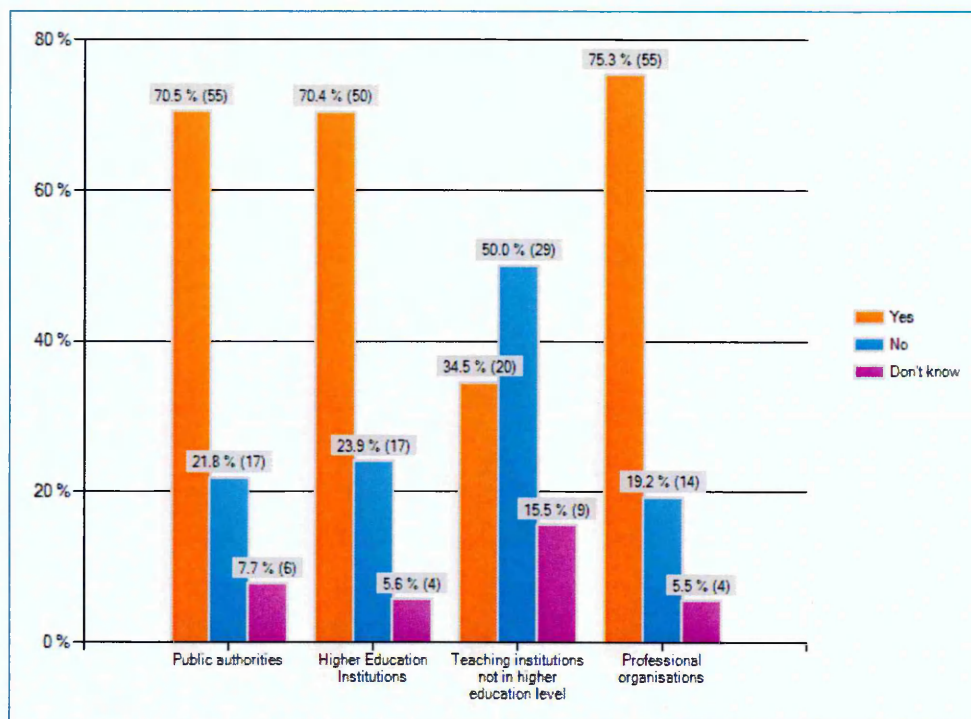


FIGURE 6.31: EXISTING PARTNERSHIPS WITH OTHER INSTITUTIONS ON LIFELONG LEARNING ACTIVITIES  
(THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

### 6.1.8 Findings on mobility

Issues related to mobility are covered in this final section. Mobility was always a hallmark of the Bologna Process and occupies the fourth objective of the Bologna Declaration. Mobility infers the movement of students and/or staff between countries for the purpose of fulfilling a training or study period abroad. The Bologna Process set a target of 20% mobility to be reached by 2020 (Leuven and Louvain-la-Neuve communiqué 2009). This survey has found that formal agreements for the exchange of students and teachers exist in 68.5% (n = 61) of institutions; and in the majority of these they transpire both for students and teachers (see figure 6.32). 68.5% (n = 61) of institutions allow students the possibility to engage in multiple mobility opportunities throughout the duration of their studies and yet for 50.0% (n = 41) of these circumstances less than 5% of the students participated in a mobility project in 2010 (figure 6.33). On average the more common duration of each mobility was between three and four months (53.2%, n = 41) (see figure 6.34) and was permitted only during a specific time period or mobility window in most situations (72.0% n = 59). Two thirds of the heads of departments (66.7% n = 58) reported that in 2010 their department

had received between one and ten students on an exchange visit (figure 6.35). On the contrary the number of teachers undertaking mobility was far less and in just under half of the circumstances (44.3% n = 39) the teachers had not engaged in a teaching exchange with other institutions (figure 6.36).

The heads of departments were asked to indicate which reasons were influential in the consideration of an exchange programme with a partner institution. These are listed in table 6.3.

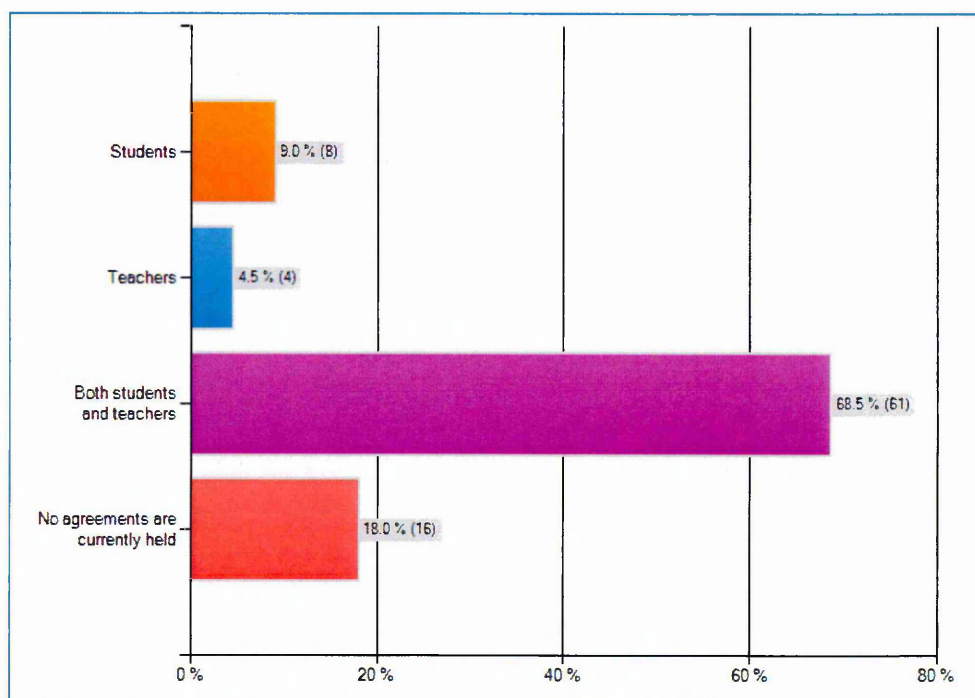


FIGURE 6.32: EXISTING FORMAL AGREEMENTS FOR MOBILITY (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



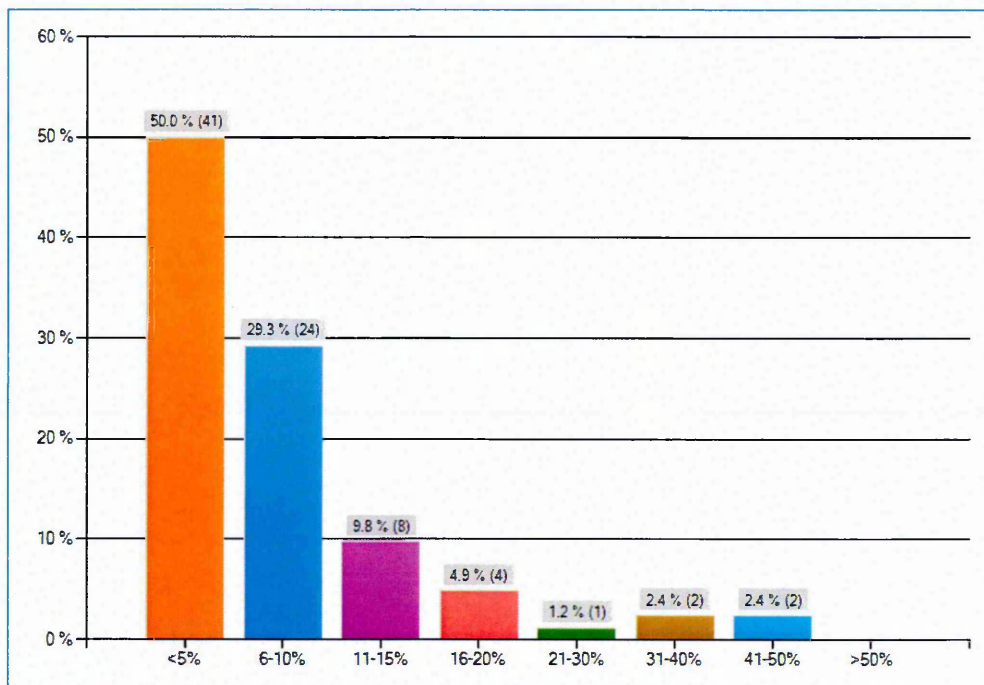


FIGURE 6.33: THE PERCENTAGE OF PHYSIOTHERAPY STUDENTS THAT PARTICIPATED IN A MOBILITY OPPORTUNITY IN 2010 (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

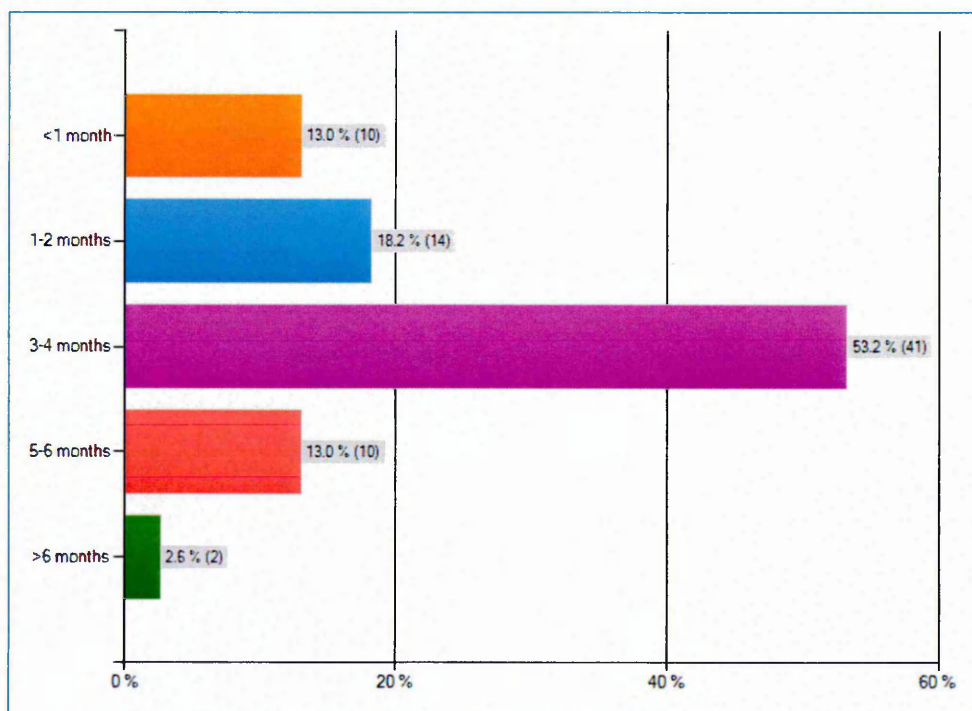


FIGURE 6.34: THE AVERAGE DURATION OF MOBILITY IN 2010 (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)



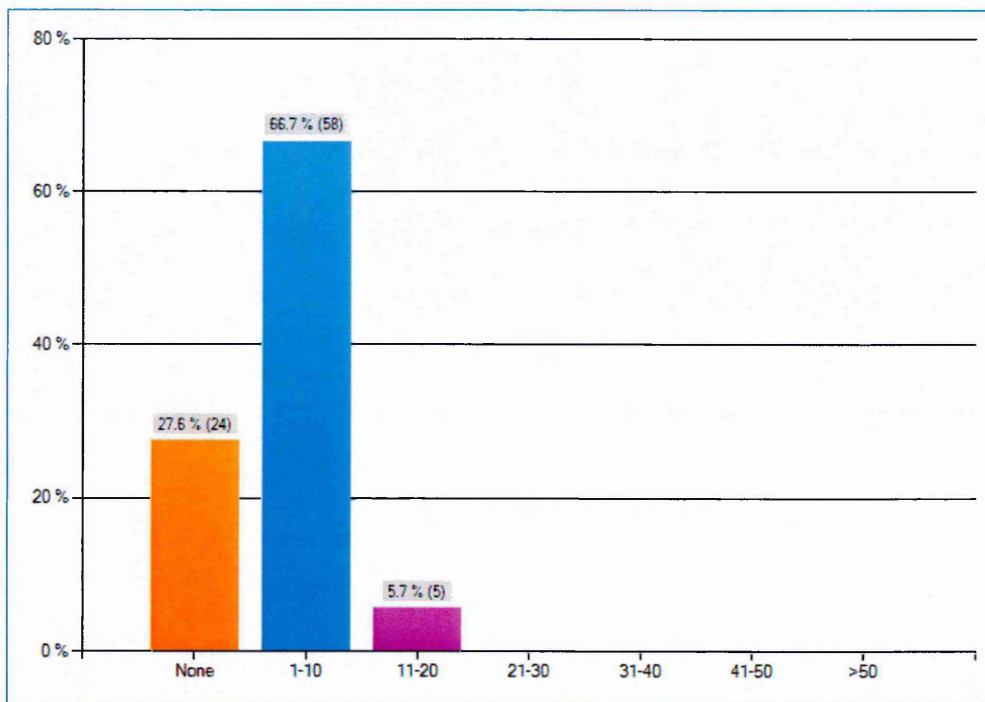


FIGURE 6.35: THE NUMBER OF PHYSIOTHERAPY STUDENTS THAT WERE HOSTED FROM OTHER INSTITUTIONS AS PART OF A RECOGNISED MOBILITY IN 2010 (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

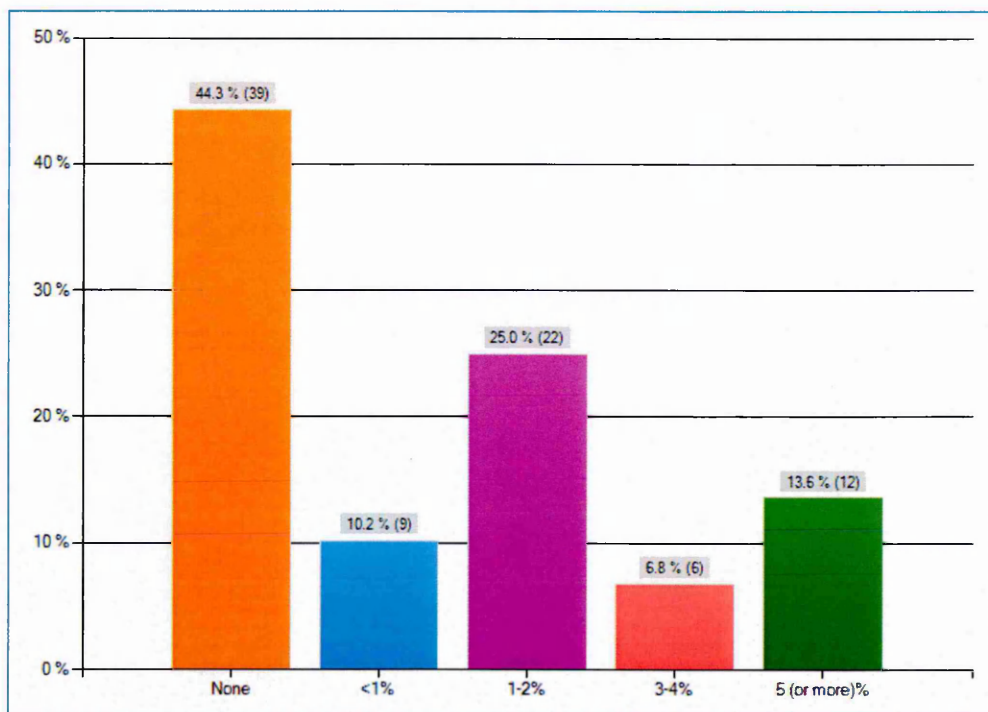


FIGURE 6.36: PHYSIOTHERAPY TEACHERS INVOLVED IN A MOBILITY OPPORTUNITY IN 2010 (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF SCHOOLS)

TABLE 6.3: CONSIDERATIONS FOR EXCHANGE AGREEMENTS BETWEEN INSTITUTIONS

Which of the following would influence the consideration for an exchange programme with a partner institution?	Exchange strongly considered	Exchange may be considered	Exchange would not be considered	Response Count
	% (n)	% (n)	% (n)	
Education status is similar for both programmes	<b>69.0% (58)</b>	31.0% (26)	0.0% (0)	84
Education status is higher in the partner programme	<b>61.3% (49)</b>	32.5% (26)	6.3% (5)	80
Education status is lower in the partner programme	5.1% (4)	<b>60.3% (47)</b>	34.6% (27)	78
Language of instruction similar to home language	<b>51.9% (42)</b>	34.6% (28)	13.6% (11)	81
Language of instruction different to home language	17.9% (14)	<b>65.4% (51)</b>	16.7% (13)	78
Language of instruction also in English	<b>71.6% (58)</b>	27.2% (22)	1.2% (1)	81
Same course structure	<b>65.4% (53)</b>	32.1% (26)	2.5% (2)	81
Different course structure	23.1% (18)	<b>66.7% (52)</b>	10.3% (8)	78
Similar post-qualification professional practice	<b>58.8% (47)</b>	37.5% (30)	3.8% (3)	80
Different post-qualification professional practice	11.4% (9)	<b>69.6% (55)</b>	19.0% (15)	79

This section has covered the range of responses to the survey questionnaire by the heads of departments of physiotherapy schools. The perspectives of the Bologna objectives have been reported particularly through the degrees and qualifications, quality assurance, social dimensions, effective outcomes and employability, lifelong learning and mobility to reflect the level of engagement with the Bologna Process within physiotherapy in higher education. The subsequent section shall report on the response to the survey questionnaire by the Enphe country coordinators.

## 6.2 Survey findings (Enphe country coordinators)

The questionnaire to the Enphe country coordinators was divided into three parts: the first part explored the respondents' understanding of the Bologna Process and their perception on its influence in their respective countries; the second part explored the general conditions for the regulation of physiotherapy on a national level; and the third part explored the implementation of the Bologna Process objectives on a national and institutional level. A return rate of 82.1% (23/28) was attained.

The list of the countries represented by the Enphe country coordinators who responded to the survey questionnaire is presented in table 6.4.

TABLE 6.4: LIST OF THE COUNTRIES REPRESENTED BY THE ENPHE COUNTRY COORDINATORS WHO RESPONDED TO THE SURVEY QUESTIONNAIRE

Participating countries	Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, Germany, Iceland, Italy, Latvia, Lebanon, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.
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### 6.2.1 Findings towards the perceptions and understandings of the Bologna Process

The first question addressed in the survey asked for the respondents to declare if they were aware of the Bologna Process. All the respondents were aware of it with equal numbers claiming to be 'knowledgeable' or 'somewhat knowledgeable' (43.5% n = 10). None of the respondents had 'no knowledge' of the Bologna Process (figure 6.37).



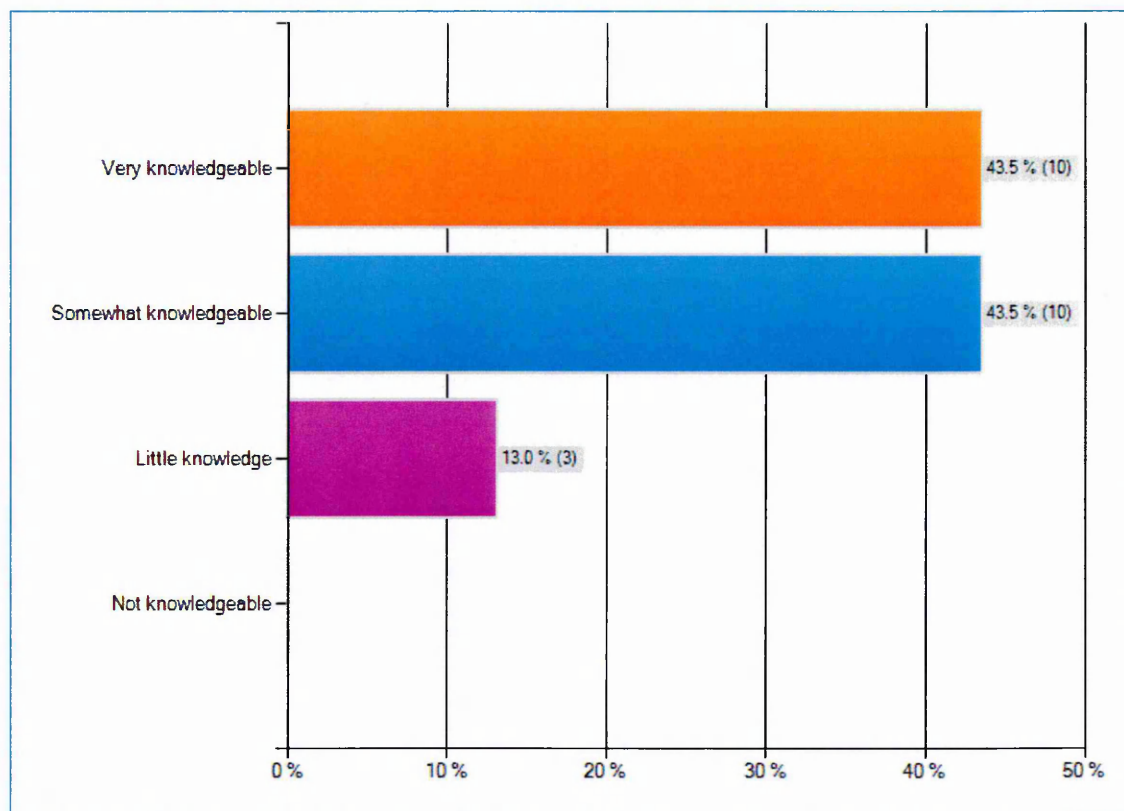


FIGURE 6.37: ENPHE COUNTRY COORDINATORS' UNDERSTANDING OF THE BOLOGNA PROCESS (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF COUNTRY COORDINATORS)

The overwhelming majority of country coordinators (95.7% n = 22) reported that the Bologna Process was either 'somewhat important' or 'very important' for the organisation of the physiotherapy programmes in their country and only one respondent reported that it had little importance (see figure 6.38). They also reported that the Bologna Process had influenced change in the organisation of the physiotherapy programmes in their country to various extents (see figure 6.39).

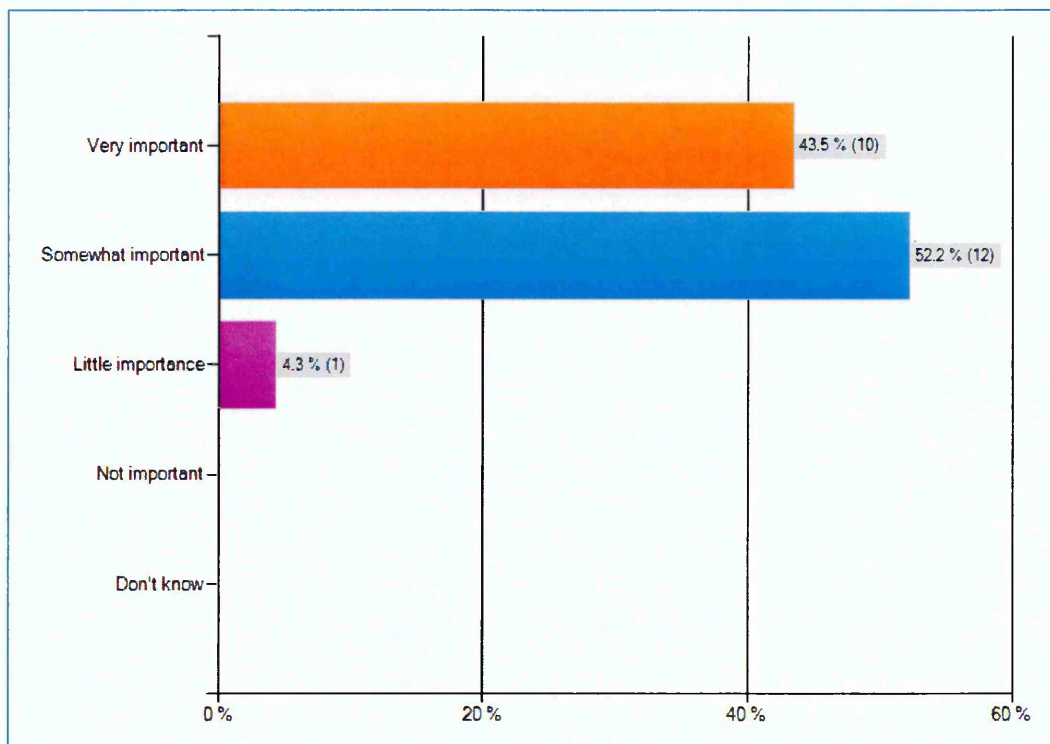


FIGURE 6.38: THE IMPORTANCE OF THE BOLOGNA PROCESS FOR THE ORGANISATION OF THE PHYSIOTHERAPY PROGRAMMES IN THE ENPHE PARTICIPATING COUNTRIES (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF COUNTRY COORDINATORS)

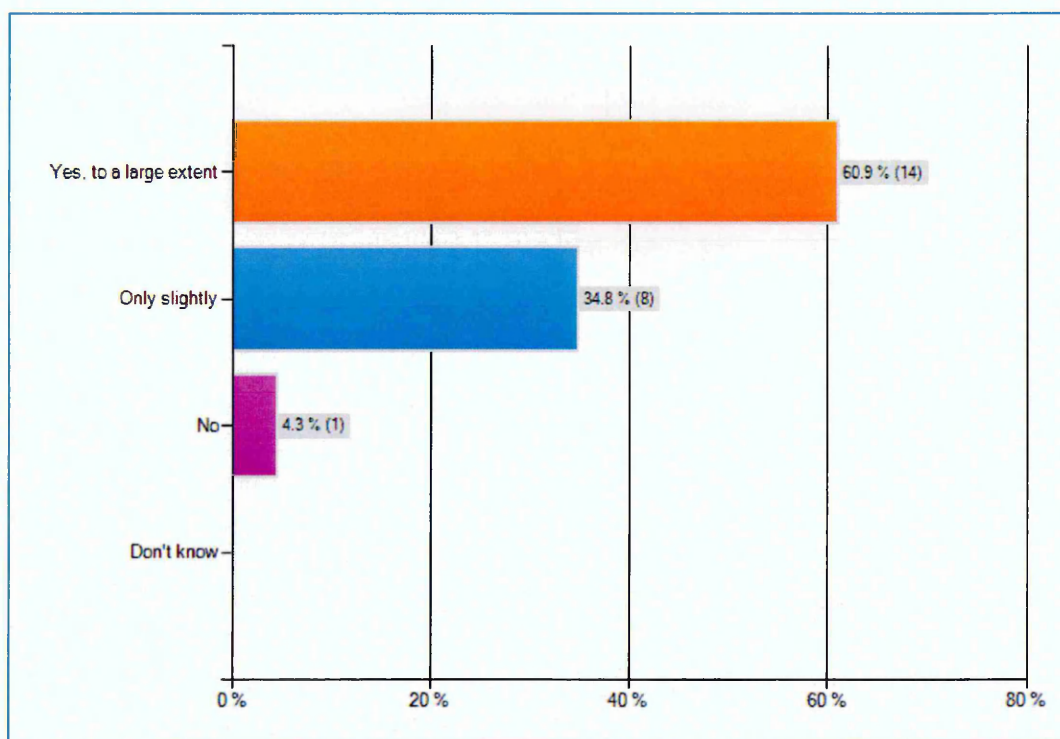


FIGURE 6.39: THE INFLUENCE OF THE BOLOGNA PROCESS ON CHANGES IN THE ORGANISATION OF THE PHYSIOTHERAPY PROGRAMMES WITHIN ENPHE (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF COUNTRY COORDINATORS)



## 6.2.2 Findings on the general conditions for regulation

### 6.2.2.1 Traditional developments

The Enphe country coordinators were asked to identify the traditional developments of higher education in their country according to a description that was provided to them, with the intention of later using these groups to select participants for the interview. Figure 6.40 identifies the spread of traditional developments as they were indicated by the coordinators. The list of countries identified in each category is laid down in table 6.5.

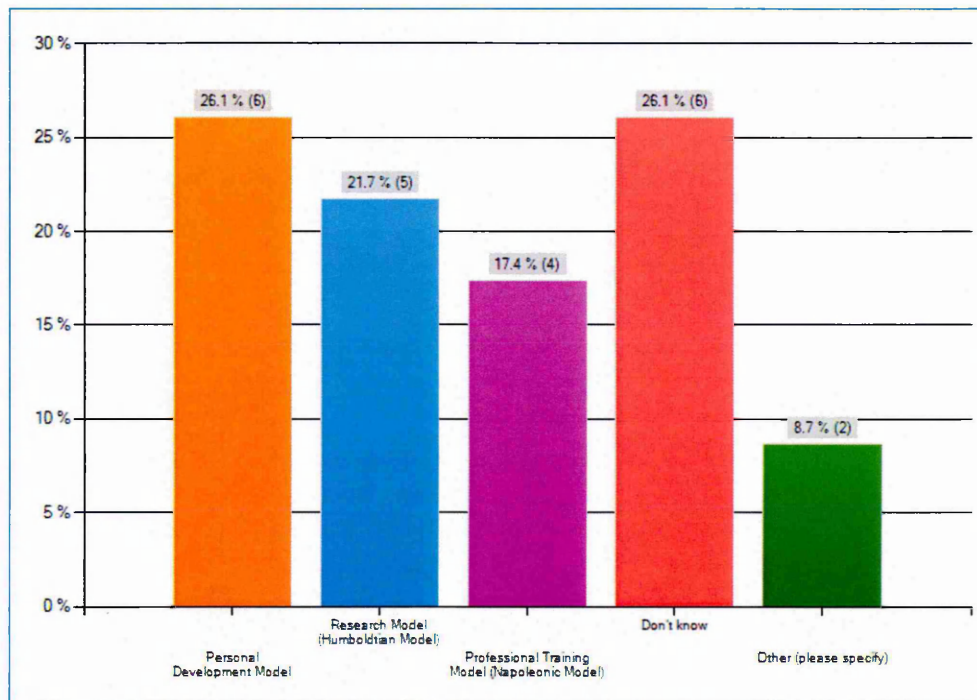


FIGURE 6.40: SPREAD OF TRADITIONAL DEVELOPMENT OF HIGHER EDUCATION AS INDICATED BY ENPHE COUNTRY COORDINATORS FOR THEIR RESPECTIVE COUNTRIES (THE VERTICAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF COUNTRY COORDINATORS)

### 6.2.2.2 Status of physiotherapy education within the national education systems

Information on the status of physiotherapy education was sought since the Bologna Process was particularly relevant in higher education echelons. In all the Enphe participating countries except for Germany, physiotherapy education was delivered at a higher education level. In Estonia it was reported that they have two systems

offering physiotherapy education at both the higher education level and also the professional/vocational level (see figure 6.41).

TABLE 6.5: LIST OF THE ENPHE PARTICIPATING COUNTRIES ACCORDING TO THE COORDINATORS' STATEMENT ON THE SYSTEMS THAT BEST DESCRIBE THE TRADITIONAL DEVELOPMENT OF HIGHER EDUCATION IN THEIR COUNTRY

<b>Personal Development Model</b>	Lebanon, Netherlands, Slovenia, Switzerland, Turkey and the United Kingdom
<b>Research Model</b>	Austria, Estonia, Iceland, Norway and Sweden
<b>Professional Training Model</b>	Finland, Poland, Malta and Spain
<b>Don't know/Others</b>	Belgium, Czech Republic, Denmark, Germany, Italy, Latvia, Lithuania, Portugal

### 6.2.2.3 Regulation of physiotherapy

With the exception of Belgium and Germany, physiotherapy is regulated on a national level in all the other participating Enphe countries. In Belgium, physiotherapy is regulated on a regional level and in Germany, physiotherapy is regulated both on a national and federal level. In 17 out of 23 countries physiotherapy is regulated by a specific law. Whilst in Finland, Latvia and the Netherlands it is reported that the professional associations regulate physiotherapy education, in all the other countries it appears that the regulation falls under the competence of a government institution.

The respondents were also asked to indicate who gave advice towards the regulation of physiotherapy education in their country. Most of the regulations are guided by the ministry responsible for education (77.3%, n = 17) or the ministry responsible for health (68.2%, n = 15) (see figure 6.42).

The general conditions for the regulation of physiotherapy for each country just described are summarised in table 6.6.

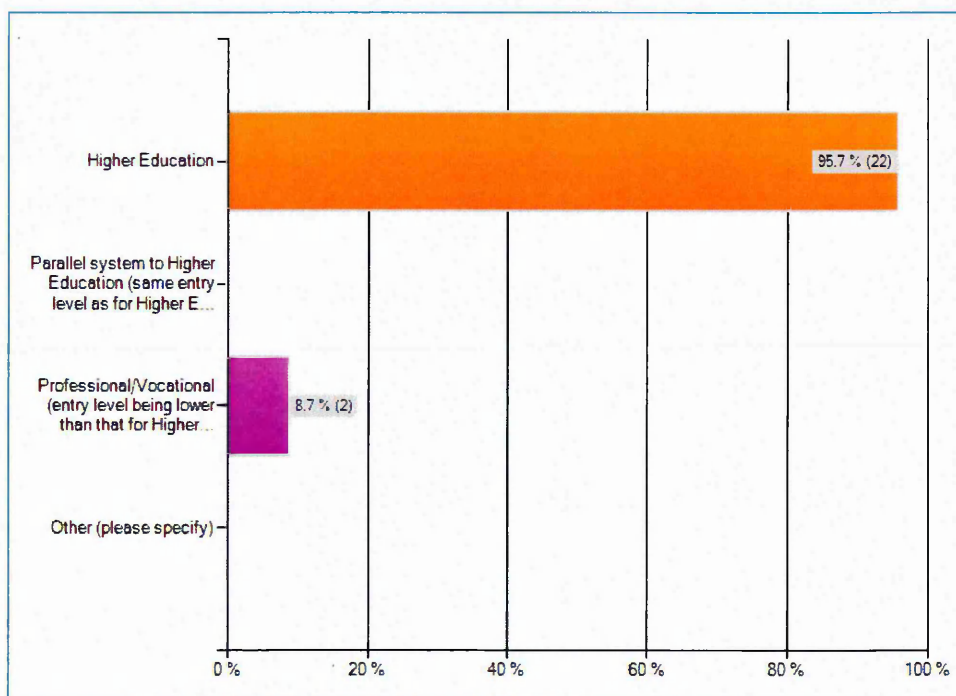


FIGURE 6.41: THE STATUS OF PHYSIOTHERAPY EDUCATION WITHIN THE NATIONAL EDUCATION SYSTEMS OF ENPHE PARTICIPATING COUNTRIES (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF COUNTRY COORDINATORS)

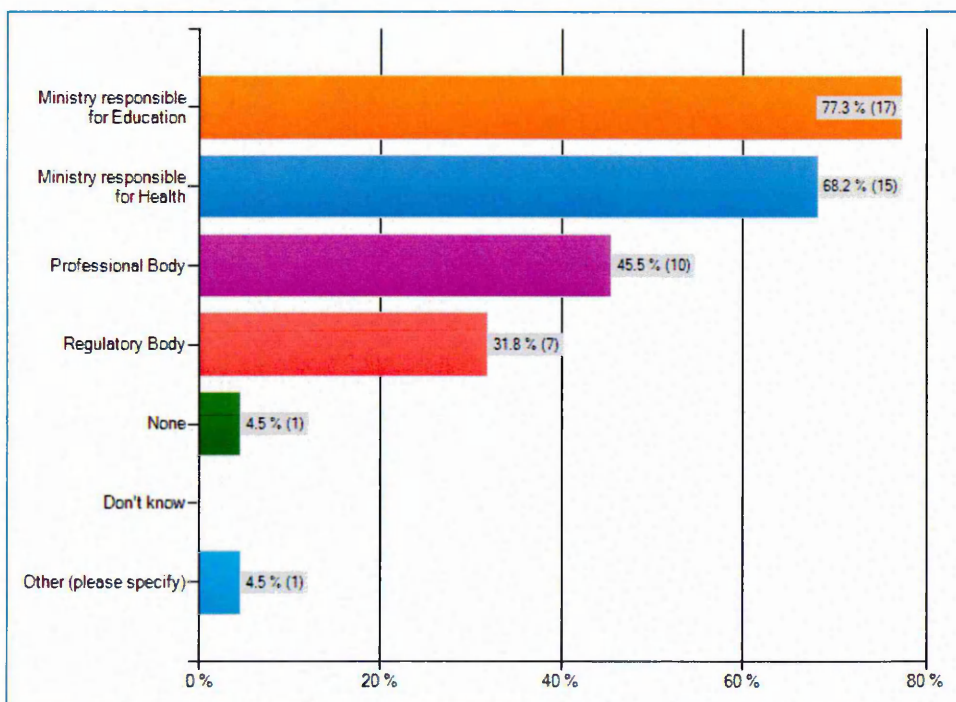


FIGURE 6.42: CONTRIBUTORS TO THE REGULATION OF PHYSIOTHERAPY EDUCATION WITHIN ENPHE PARTICIPATING COUNTRIES (THE HORIZONTAL AXIS REPRESENTS THE RELATIVE AND ABSOLUTE NUMBER OF COUNTRY COORDINATORS)

**TABLE 6.6: SUMMARY IDENTIFYING THE NATIONAL EDUCATION STATUS, REGULATORY LEVEL AND THE PRESENCE OF SPECIFIC LAWS FOR PHYSIOTHERAPY EDUCATION IN THE INDIVIDUAL ENPHE PARTICIPATING COUNTRIES**

	National education status		Regulatory level		Specific laws	
	Higher education	Professional / Vocational	National	Regional	Yes	No
<b>Austria</b>	•		•		•	
<b>Belgium</b>	•		•	•	•	
<b>Czech Republic</b>	•		•		•	
<b>Denmark</b>	•		•		•	
<b>Estonia</b>	•	•	•		•	
<b>Finland</b>	•		•		•	
<b>Germany</b>		•	•	•	•	
<b>Iceland</b>	•		•			
<b>Italy</b>	•		•		•	
<b>Latvia</b>	•		•			•
<b>Lebanon</b>	•		•		•	
<b>Lithuania</b>	•		•			•
<b>Malta</b>	•		•		•	
<b>Netherlands</b>	•		•		•	
<b>Norway</b>	•		•		•	
<b>Poland</b>	•		•		•	
<b>Portugal</b>	•		•		•	
<b>Slovenia</b>	•		•		•	
<b>Spain</b>	•		•			•
<b>Sweden</b>	•		•			•
<b>Switzerland</b>	•		•		•	
<b>Turkey</b>	•		•			•
<b>United Kingdom</b>	•		•		•	

### 6.2.3 Implementing the Bologna Process

The third and final section of the survey to the Enphe country coordinators sought to identify which of the indicated components within the Bologna Process had been implemented in their respective country. I also wanted to understand which of these were implemented on a national level and hence implying that they had to be adopted by all the physiotherapy schools; and which were implemented at an institutional level. These findings served to evaluate the extent of the implementation. They were not confirmed through third sources. They served for me to use them as a springboard for the interviews later on that would assess the impact of the implementation. The overall national or institutional levels of obligation as described by the Enphe country coordinators are reported in Table 6.7. A comprehensive overview on the extent of the implementation of a selected number of Bologna goals for each country, as described by the Enphe country coordinators, is reported in Table 6.8.

#### 6.2.3.1 Implementation of the Bologna structures

- Degree structure and duration of programmes

In Belgium, Czech Republic, Denmark, Estonia, Finland, Germany, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom a degree structure system based on the three cycles of the Bachelor, Master and Doctoral level exists for physiotherapy education as a national plan. In Iceland and Lebanon this is possible but depends on the institution. In Austria and Malta there is no possibility as one of the levels does not exist. In 20 countries, a first cycle of studies, that is the Bachelor degree lasting a minimum of three years, is possible as a national requirement with the exception of Lebanon where it does not exist and Poland where the decision falls under the responsibility of the institutions.

- Joint degrees and programmes

The European dimensions are promoted through the sixth objective. There is no European model on the promotion of the European dimension that is followed by



physiotherapy schools. The promotion of a European dimension on curricular development is a national obligation in 52.4% (11/21) of the responding countries and the promotion of a European dimension on inter-institutional cooperation is only nationally obligatory in 23.8% (5/21) of countries. The recognition of joint degrees awarded in two or more European countries is a national directive in Malta, the Netherlands, Poland, Slovenia and Spain. In Iceland, Sweden and Turkey recognition of joint degrees does not exist. In Denmark, Estonia, Finland, Italy, Lebanon, Norway, Portugal and Switzerland the recognition of joint degrees is an institutional directive.

### **6.2.3.2 Implementation of the Bologna tools**

- **Qualifications framework**

A National Qualifications Framework is adopted by physiotherapy schools in Denmark, Estonia, Germany, Iceland, Italy, Latvia, Malta, the Netherlands, Norway, Poland, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. This is similar to, or effectively the European Qualifications Framework, in Austria, Denmark, Germany, Latvia, Malta, the Netherlands, Norway, Poland, Slovenia, Spain, and Switzerland.

- **Student-centred approaches**

Student-centred approaches facilitating the learning experience of the student are noted in the adoption of the tools such as the European credit transfer and accumulation system (ECTS) and the adoption of learning outcomes. The ECTS is reported to be a national obligation on physiotherapy schools in Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Iceland, Italy, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland, and Turkey. In Lebanon and the United Kingdom this is an institutional directive whilst in Latvia the ECTS is not used.

The adoption of learning outcomes for physiotherapy degree programmes is a national directive in Austria, Denmark, Finland, Iceland, Italy, Latvia, Malta, the Netherlands, Norway, Poland, Portugal, Slovenia, Sweden, Switzerland, and the United Kingdom. In

the Czech Republic, Estonia, Lebanon, Spain and Turkey the adoption of learning outcomes is an institutional directive.

- **The Diploma Supplement**

The Diploma Supplement is another Bologna tool that is implemented nationally in Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland and Turkey. In Lebanon, Poland and the United Kingdom the issuance of the Diploma Supplement remains an institutional directive.

### **6.2.3.3                      Quality Assurance**

The fifth objective of the Bologna Declaration aimed towards European cooperation in quality assurance. This has become a national directive influencing physiotherapy education in the Czech Republic, Finland, Germany, Latvia, Lithuania, Malta, the Netherlands, Norway, Slovenia, Spain and Sweden. It remains an institutional directive in Denmark, Estonia, Italy, Lebanon, Poland, Portugal, Switzerland, Turkey and the United Kingdom. There is no European cooperation on quality assurance in Iceland.

The European Standards and Guidelines for quality assurance in higher education (ESG) is a tool that was developed to promote the European cooperation in quality assurance and has been adopted on a national level in Austria, Czech Republic, Italy, the Netherlands, Poland, Slovenia, Spain and Sweden.

### **6.2.3.4                      Social dimensions**

Holistically the social dimensions serve to promote a European dimension on integrating programmes for study, training and research making higher education more accessible. As yet this is only a national obligation for physiotherapy schools in Latvia, the Netherlands, Poland, Spain and Sweden.

Employability is a measure of effective higher education outcome. The Bologna Process promotes relevant employment to be accessible after the completion of the Bachelor degree. A first cycle of studies in physiotherapy that is relevant to the European labour market as an appropriate level of qualification is a national directive in Austria, Czech Republic, Denmark, Estonia, Finland, Iceland, Italy, Latvia, Lithuania, Malta, the Netherlands, Slovenia, Spain, Sweden, Turkey and the United Kingdom. In Poland and Portugal the first cycle relevance for employment on the European labour market is an institutional discretion. In Germany, Lebanon, Norway and Switzerland it is not sure whether this exists or whether it is a national or institutional directive.

## 6.2.3.6

**Lifelong learning**

Lifelong learning has been interpreted both in the provision and hence facilitation of activities and also in the recognition of prior learning. Enphe country coordinators were asked to indicate which of these were adopted. The provision for lifelong learning has been adopted on a national level in Finland, Germany, Iceland, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Slovenia, Switzerland, Turkey and the United Kingdom. It remains an institutional directive in Austria, Czech Republic, Estonia, Lebanon, Portugal, Spain and Sweden.

Prior learning is recognised as a national directive in Austria, Denmark, Estonia, Finland, Malta, the Netherlands, Norway, Portugal, Slovenia, Sweden and the United Kingdom. It remains an institutional directive in Germany, Iceland, Italy, Latvia, Spain, Switzerland and Turkey.

## 6.2.3.7

**Mobility**

The final issue investigated was the fourth Bologna objective related to mobility. The mobility for students allowing them access to study and training opportunities in a foreign country is a national directive in Czech Republic, Denmark, Iceland, Latvia, Lithuania, Malta, the Netherlands, Norway, Slovenia, Spain, Sweden and Turkey. It

remains an institutional directive in Austria, Estonia, Finland, Germany, Italy, Lebanon, Poland, Portugal, Switzerland and the United Kingdom.

Mobility opportunities according to the Bologna Process should also be made available for the teachers, researchers and administrative staff. This is a national directive in Czech Republic, Denmark, Finland, Iceland, Latvia, Lithuania, Malta, the Netherlands, Norway, Slovenia, Spain, Sweden and Turkey. It remains an institutional directive in Austria, Estonia, Germany, Italy, Lebanon, Poland, Portugal, Switzerland and the United Kingdom.

The final consideration towards mobility was towards the promotion of the European dimension of mobility schemes such as the ERASMUS programme. Only six countries promote these on a national level that are Austria, Latvia, Malta, Poland, Spain and Sweden. They are promoted as an institutional directive in Denmark, Estonia, Finland, Iceland, Italy, the Netherlands, Norway, Portugal, Slovenia, Switzerland, Turkey and the United Kingdom.



**TABLE 6.7: OVERALL RESPONSES ON THE IMPLEMENTATION OF THE BOLOGNA PROCESS AT NATIONAL OR INSTITUTIONAL LEVEL ACCORDING TO ENPHE COUNTRY COORDINATORS**

	National	Institutional	Does not exist	Don't know
	% (n)	% (n)	% (n)	% (n)
Issue of a Diploma Supplement	81.8% (18)	13.6% (3)	0.0% (0)	4.5% (1)
A degree structure system based on three cycles (bachelor, master and doctoral)	82.6% (19)	8.7% (2)	8.7% (2)	0.0% (0)
First cycle of studies (bachelor degree) lasting a minimum of three years	90.9% (20)	4.5% (1)	4.5% (1)	0.0% (0)
A first cycle of studies (bachelor degree) relevant to the European labour market as an appropriate level of qualification	72.7% (16)	9.1% (2)	0.0% (0)	18.2% (4)
European Credit Transfer and Accumulation System (ECTS)	86.4% (19)	9.1% (2)	4.5% (1)	0.0% (0)
Mobility of students allowing them access to study and training opportunities	54.5% (12)	45.5% (10)	0.0% (0)	0.0% (0)
Mobility for teachers, researchers and administrative staff	59.1% (13)	40.9% (9)	0.0% (0)	0.0% (0)
European co-operation in quality assurance	50.0% (11)	40.9% (9)	4.5% (1)	4.5% (1)
Adoption of the European Standards and Guidelines for quality assurance in higher education	38.1% (8)	38.1% (8)	4.8% (1)	19.0% (4)
Promotion of a European dimension on Curriculum development	52.4% (11)	33.3% (7)	4.8% (1)	9.5% (2)
Promotion of a European dimension on Inter-institutional co-operation	23.8% (5)	52.4% (11)	4.8% (1)	19.0% (4)
Promotion of a European dimension on Mobility schemes	28.6% (6)	57.1% (12)	0.0% (0)	14.3% (3)
Promotion of a European dimension on Integrating programmes for study, training and research	23.8% (5)	47.6% (10)	9.5% (2)	19.0% (4)
Provision for lifelong learning	63.6% (14)	31.8% (7)	0.0% (0)	4.5% (1)
Involvement of the students in decision-making processes	27.3% (6)	72.7% (16)	0.0% (0)	0.0% (0)
Recognition of joint degrees awarded in two or more European countries	23.8% (5)	38.1% (8)	14.3% (3)	23.8% (5)
Adoption of a national qualifications framework	76.2% (16)	19.0% (4)	4.8% (1)	0.0% (0)
Adoption of the European Qualifications Framework	52.4% (11)	38.1% (8)	4.8% (1)	4.8% (1)
Adoption of learning outcomes and credits	71.4% (15)	23.8% (5)	0.0% (0)	4.8% (1)
Recognition of prior learning	52.4% (11)	33.3% (7)	0.0% (0)	14.3% (3)



TABLE 6.8: A COMPREHENSIVE OVERVIEW OF THE IMPLEMENTATION OF CERTAIN BOLOGNA STRATEGIES FOR EACH COUNTRY

	Diploma Supplement	A degree system based on three cycles	First cycle lasting a minimum of three years	First cycle relevant to the European labour market	Adoption of ECTS	Adoption of ESG for quality assurance	Provision for LLL	Adoption of a national qualifications system	Adoption of the EQF	Adoption of learning outcomes and credits
Austria										
Belgium										
Czech Republic										
Denmark										
Estonia										
Finland										
Germany										
Iceland										
Italy										
Latvia										
Lebanon										
Lithuania										
Malta										
Netherlands										
Norway										
Poland										
Portugal										
Slovenia										
Spain										
Sweden										
Switzerland										
Turkey										
United Kingdom										

Key:

	National
	Institutional
	Does not exist
	Not known
	Missing data

Key:

ECTS: European Credit and Transfer System

ESG: European Standard Guidelines

LLL: Lifelong Learning

EQF: European Qualification Framework

This section has reported the findings following the survey questionnaire received from the Enphe country coordinators of the European Network of Physiotherapy in Higher Education (Enphe). It has served to identify the national and institutional directives for the Bologna goals. It has also served to identify the historical traditions of higher education in the participating countries in order to group participants for selection to an interview.

## Conclusion

This chapter has reported the findings of the two survey questionnaires sent to the heads of departments of physiotherapy schools and the Enphe country coordinators. The findings have revealed the respondents' understanding of the Bologna Process and the extent of its implementation on a national and institutional level. The next chapter shall report on the findings of the interviews.

The analytic process adopted for this study was the *framework analysis* approach that was discussed in chapter 5. In this chapter the findings pertaining to the interviews shall be revealed.

The findings from the interviews are illuminated through twenty themes that were identified. Each of these themes will be dealt with separately, however, it will be apparent that they are not mutually exclusive and the presentation of the findings might appear to manifest some repetition. This was done with purpose to acknowledge the different viewpoints with which the findings were analysed.

Ultimately these issues reflect the general understanding towards the influences of the Bologna Process on physiotherapy education across Europe by the twelve participants in this part of the study.

### 7.1 Nature and conduct of the interviews

The Enphe country coordinators who responded to the survey questionnaire (n = 23) indicated the traditional development of higher education in their country (table 6.5) and served as a base for the random selection of three interviewees from each of the four groups. The participants were randomly selected by pot luck and invited to an interview. Nine from the twelve persons accepted the invitation whilst three informed me of their indisposition due to various reasons. The three were asked to nominate a person whom they believed was capable of acting as their alternate. These three persons were contacted and briefed about the study. In due course they too received an official invitation to participate on the study and all of them accepted. This resulted in twelve persons from twelve different countries sitting for the interview.

Semi-structured interviews were carried out in English and conducted using computer assisted audio-visual via Skype<sup>®</sup> video (n = 4), computer assisted audio via Skype<sup>®</sup> (n = 5) and face-to-face (n = 3). Each interview followed the same interview guide and on average they took between 60 and 70 minutes. The interviews were all digitally recorded and transcribed.

## 7.2 Emerging findings throughout the analytic process

The familiarisation stage (stage 1) of the framework approach took place over a period of four to five months. Each hour of recorded interview took an average of six and a half hours of transcription time. Eight participants returned the transcripts with minor editorial changes and further clarification comments that were noted in the data analysis.

Twelve *a priori* themes were identified from the objectives of the Bologna Process and these were established before the start of the data collection as they also guided the construction of the survey questionnaire. Six emerging themes were identified throughout the familiarisation stage and these were developed through a process of intuitive thinking whilst listening, transcribing and reading through the interview scripts. These activities together helped to develop the early thematic framework (table 7.1) and thus also completed the second stage of the analytic process.

Throughout the third stage of the framework approach (indexing stage), the thematic framework was further revised into a set of textual codes as the judgements on the relevance and meaning of the data started to materialise from the implicit connections in the participants' contributions. This process continued with the creation of thematic charts that corresponded to the textual codes in the fourth stage (the charting stage). These charts were coded with the letter A to AG. The list of textual codes and their alphabetic code are listed in table 7.2.



TABLE 7.1: THE EARLY THEMATIC FRAMEWORK

<b>The Thematic Framework</b>	
<i>a priori themes</i>	<i>emerging themes during 'familiarisation'</i>
Degree structure and duration of programmes	Harmonisation vs Diversity
Diploma Supplement	Influences
Employability	Experiences
Global Dimensions	Professional Issues
Lifelong Learning	Misconceptions
Mobility	Barriers
Qualifications Framework	
Quality Assurance	
Recognition	
Social Dimension	
Student Workload	
Systems of Credits (ECTS)	

TABLE 7.2: THE TEXTUAL CODES THAT WERE CONSTRUCTED DURING THE INDEXING STAGE

A Applied sciences versus universities	Q Influences of the Bologna Process
B Autonomy	R Lifelong Learning
C Before <i>Bologna</i>	S Misconceptions on the Bologna Process
D Credit value	T Mobility
E Cultural differences	U Negative aspects
- Diploma Supplement	V Obstacles to development
F Diversity	W Perceived threats by others
G Diversity or harmony	X Positive aspects
H Duration of cycles	Y Promoting the European Dimension
I Easily readable and comparable degrees	Z Quality Assurance
J Entry level	AA Relation to profession
K Experiences on credits	AB Research
L General influences of the educational system	AC Students perspective
M Harmonisation	AD System based on cycles
N Impact in Europe	AE System of credits
O Important changes	AF Teachers' attitudes
P Influences not related to the Bologna Process	AG Threats



The analysis of each of the thematic charts by way of mapping out the range and nature of the contents of each chart identified 223 excerpts (refer to appendix 25). Preliminary explanations in lieu of possible underlying theories and/or concepts, to identify the differential impact in terms of institutional, socio-economic or cultural influences was carried out and related back to the Bologna Process objectives in a manner that served to interpret these findings. This fulfilled the fifth and final stage of the framework approach. A final revision of the thematic framework identified twenty themes that were adopted to evaluate the influences of the Bologna Process on physiotherapy education. These are represented in table 7.3.

TABLE 7.3: FINAL LIST OF TWENTY THEMES TO EVALUATE THE INFLUENCES OF THE BOLOGNA PROCESS ON PHYSIOTHERAPY EDUCATION

Institutional status	Autonomy	Degree structure	Diversity	Harmonisation
System of credits	Influences on the educational system	Europeanisation	Important changes	External influences
Direct influences	Misconceptions	Mobility	Negative aspects	Obstacles
Perceived threats	Positive aspects	Relation to the profession	Students perspective	Teachers attitude

## 7.3 Correlating the findings with the themes

### 7.3.1 Institutional Status

The status of physiotherapy within the echelon of higher education was reported to be elevated as a direct result of the Bologna Process. With the introduction of physiotherapy in the universities, physiotherapy became regarded as an academic qualification. As a consequence, at a most basic level, this influence was noted to perpetrate the appropriate recognition of the profession.

*(Participant 4) ... and also we entered in to the academic level because before 1999 we were not considered appropriately as professionals. We had reached in 1994 the possibility to have a law that described the competencies of a physiotherapist and so that was the first important recognition of our autonomy and our profession, but this is a professional perspective. From an educational perspective the important step was the introduction of schools at a University. And this was possible with the Bologna process.*

The status of the different institutions within the national educational systems was noted to be influenced by the degree structures as this also influenced the possibility of access to master's and doctoral degrees and with which comparisons with other countries were being made.

*(Participant 10) Yes it's of great importance in Europe because you only have to go to Denmark, or to Norway and there students do not have straight access to master programmes; and so in C10 you have a direct access to master and PhD studies.*

On the other hand it has also appeared that physiotherapy is still leaning on vocational training and as such there are important implications for clinical practice/training and human resources.

(Participant 9) *Well the shift, the basic premise of a polytechnic when we were involved and based in a polytechnic, is that it had a very strong ethos on vocational training; so we fitted really well into anything that was physio related in a polytechnic really really; because they understood about work base learning, they understood about vocational training and how you need to have resources and how you need to implement the clinical placements and that sort of thing, whereas university - when we all became and moved into universities didn't have that background. ... some schools who have gone into university training from hospitals have had difficulties in persuading the university to recognise what vocational training means; because a lot of their students were doing art, humanities and things like that. They only needed to see them for a short period of time; they did not need to see them on a regular basis and so that the support systems that were needed were not understood to begin with. So the polytechnic that was, suited as well in terms of, erm... knowing what we need and how we needed to manage. The universities that we have gone into, who are old-time universities, needed a bit of time to get used to the fact that they were bringing on courses that were more resource intensive and staff intensive than previously thought.*

### **7.3.2 Autonomy**

Institutional autonomy and professional autonomy were noted to have an influence on the content of the course programmes and this was interpreted also in the context of the structure of degrees in different countries.

(Participant 11) *Coming to Bologna, I think one has to emphasise first of all that ... one has to define physiotherapy; because it is not just a definition of what a physiotherapist is, but it's also what the philosophy of what physiotherapy is in that country ... If I am looking at a country in which they are still not autonomous, then they don't need to spend so much time on carrying out assessment skills because they don't need to go down that lane because the diagnosis and what to do is given to them. So, and each university has its own philosophy. Some universities which are very traditional with exercise will promote exercise. Some are very traditionally closely associated to spas and hydrotherapy and their courses would contain what we consider to be an excessive amount of study units on these subjects.*

It was also noted however that in certain circumstances the rigid framework imposed by governing authorities on higher education did not allow for independent decisions in course structures.

(Participant 4) *[The university] has to follow a general plan which is given by the Ministry of University. To give you an idea these rules are so heavy, so important, that they give us a rigid framework about the planning of our activities, the number of credits, the number of teachers, so it's quite a rigid framework that we have to follow; and especially according to the new reform that will start with the next academic year in October, there is a very heavy and underlined important framework which obliges us to cut a number of hours and activities, so we are autonomous but not so autonomous to decide to do more hours in for example chemistry or anatomy, we have to follow an important series of rules and can't go deeper in certain topics with certain teachers. The activities are strictly and strongly planned according to the general rules of the Ministry.*

Autonomy also had implications for the understanding of diversity and harmonisation within and across course programmes. Although universities are considered to be autonomous institutions, they still required to follow national directions, for example in the total credit content of a course, but not necessarily on how many credits to assign to each component within the course programme.

(Participant 3) *Universities in (my country) have something that we call, erm... autonomy. That means that schools are themselves responsible for the quality of the education and also for how they build their programme but, erm... we have the Ministry of Education who is giving us principles on how to do this; so we are following general principles for how to build a study programme and also then we have some of the questions that are also based on the law; so according to (our) law a programme in University of Applied Sciences, not only a PT programme but all programmes, shall have at least some kind of general studies including, for example languages, then professional studies. That means the PT studies. Every programme shall also have clinical placements in professional higher education; also elective studies should be included and also thesis; and of course we are following the European qualification framework and also we have the national qualification framework that we are obliged to follow. But there may be differences, you can for example have more focus on health promotion in one school and more focus in rehabilitation in another school.*

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(Participant 11) *See, what Bologna doesn't tell you, is how many of these ECTS ought to be in what subjects. It just tells you that a course ought to have 240 or 180 ECTS, but it doesn't tell you what they have to be.*



University autonomy was not always and only influenced by government agencies but also by professional bodies.

*(Participant 9) ... so for example in 2009 we had a huge validation ... we said that we met all of their standards, but [the professional body] were free to ask us how, and free to ask us to explain anything they didn't understand; and then subsequently if they weren't happy they were also free to say that they wouldn't approve the course. So ultimately they are the regulatory bodies which have quite a lot of power over us but we are autonomous in how we actually manage the standards and implement them.*

### 7.3.3 Degree structure

Before the onset of the Bologna Process some countries appear to have experienced differences in the physiotherapy curriculum amongst universities in the same country. This had implications on other factors such as mobility. Shorter degrees were linked to less time in clinical practice and implied less professional autonomy.

*(Participant 2) There were differences before and we had really big problems with exchanging students inside the country because the curriculum was different.*

*What we were lacking was the kind of professional that could work more autonomously and that could have more security, since the other degree was very short, so not so much time for clinical settings and so on.*

With the implementation of the Bologna Process, shorter degrees were still possible and some courses have been restructured from a four-year degree to a three-year degree programme. Yet they were still perceived to be too short for physiotherapy education. As a consequence, programmes struggled to accomplish all the theoretical and practical expectations to an extent where an understanding was formed that knowledge gaps had been created. This was perceived to decrease the quality of the course if it had to happen.



(Participant 10) *I think we are struggling with squeezing already the four year programme into a three year programme. Everyone struggles with this and the problem with both theoretical and practical work that they have to be prepared for... It's a bit short though. A three year programme is a short programme but that's the agreement in the Bologna process, so.*

----

(Participant 7) *Because we think, we have had 4 years since 1978, before we've had three years. We fought a lot to get this fourth year to have more clinical education and to have more research. And in the traditional schools, before, we have had 47 weeks a year over four years; and now we have 34 weeks over one year times three. So we really teach, erm... example wise, and what would be the right term, we have to have the courage that you know you have knowledge gaps; you can't teach everything anymore, not at all.*

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(Participant 11) *No, I can't see a value in [a three year course]. If it would have to been done, it would be done, but at the detriment of the quality of education.*

Shortening the degrees was also noted to have been met positively with respect to the opportunities resulting from the restructuring of the degree programmes.

(Participant 8) *When the Bologna Process came and the programmes changed, I can say that one positive thing is that in our programme there is now quite a lot of practical training; but before that when it was a four-year programme, it was very marginal, because there was only 3 months of practical training in 4 years, so it was very little, but now it is a lot more, practical training, so this is what is I think, very positive. Because our four-year programme, we were, they were more focusing doing science work and right now this programme is more related to practical activities.*

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(Participant 9) *... so it has had an effect on how we actually teach because rather than having all the hours that we would like we are actually constrained by the number of hours that we have; so we have to rely on students being able to find the things out and becoming autonomous and lifelong learners themselves.*

The length of the shorter three year bachelor programme was justified by legislative requirements and financial restraints and also by having longer pre-university education programmes.

(Participant 1) ... *there is a legislation which says a bachelor degree is fixed with six semesters. So even if all the physiotherapists who would want 7 or 8 semesters for the basic physiotherapy training to bachelor level and for the entry into the profession, we can't really make it, do it, because the law says it has to be in six semesters.*

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(Participant 9) *I think it's a financial thing mainly that we can't have four year courses. We have to make sure that they are at least 3 years, no longer.*

----

(Participant 10) *We have a higher entry level into the programme than in most other European countries. ... (We) have a longer basic education.*

The change to a longer four-year Bachelor degree programme had implications for professional recognition but also appeared to contradict the general flow in Europe.

(Participant 2) *I think this is because people were scared that maybe physiotherapy or nursing or others who would choose 3+2 and maybe others like biology or chemistry would choose 4+1; so again it could be differences between 3+2 and 4+1. And still like the old model where 'you are three year education, you are not real university studies...'*

*That was very funny to see, that while the Scandinavian countries and other countries chose the 3+2; and then we were like 'What! What were we doing? We thought we were moving to the most innovative system and now we are the different people again!' But at least as you maybe know, for many people it is better that they compare themselves in the same country not with others abroad, so. For many people the fact that physiotherapy is a four year education, it's the same as the other degrees in other areas.*

### 7.3.4 Diversity

Diversity was addressed in the preservation of those differences that safeguarded the different cultures and in order to protect the different backgrounds of physiotherapists.

(Participant 4) *We do not, in my opinion, have to go for total conformity, of unification of programmes, but we have to be aware of the differences that exist amongst countries and it is important when physical therapists have a different background. He or she has to have a core of competences common to everybody but it is correct, and we have to pay attention to certain differences.*

(Participant 12) *The approach from the different countries is different according to the culture. That needs to be preserved. We can't be all the same in the way of looking and being in the health system. ... I defend the harmonisation and that's where the Bologna Process is good. It forces us to be more aware of what is happening in the other countries and we have to look outside but at the same time I feel that we have to keep our individuality so we need to have diversity in between countries. ... I agree with diversity and I agree that a few countries can have erm... to achieve the Bologna demands they need more time than others, and it's also related with erm... the culture.*

Diversity was exemplified in the content of the programmes rather than in its structure and this would allow for innovation at the workplace.

(Participant 3) *But there may be differences, you can for example have more focus on health promotion in one school and more focus in rehabilitation in another school.*

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(Participant 9) *... I quite like the diversity. I like the fact that the Bologna Process offers the precepts to work to; and I think that we can implement them very differently along the path of a student trying to come to become a graduate; but also the diversity of the degrees allows you to produce something slightly different if you get, they can all bring something slightly different to the workplace, whereas if you're all the same, we're never going to reinvent ourselves...*

The recognition of diversity was understood to have to meet a critical level of openness that acknowledged the strengths of different cultures as long as the final outcome was similar.

(Participant 10) *... it demands also a certain amount of erm... generosity and openness so that you can see that there are many flowers in this area and erm... some might be more academically oriented ... and there are some like the Dutch who might be more practically oriented erm... as long as we agree on a minimum level erm... then we can go in different directions I think, different profiles.*

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(Participant 11) *... the product should be the same; it is the process that should be diverse, these are the terms that I am happier with.*

### 7.3.5 Harmonisation

Harmonisation was found to impinge on a number of topics as demonstrated in box 7.1. Harmonisation facilitated awareness particularly in view of what was occurring in other countries.

BOX 7.1: TEN REASONS THAT IMPINGED ON  
HARMONISATION THAT WERE DRAWN  
FROM THE DATA

- Facilitates awareness
- Requires certain conditions to exist
- Avoids dysfunction
- Bridges gaps
- Adds security
- Provides a common platform
- Facilitates mobility
- Avoids competition
- Respects differences
- Promotes barriers

(Participant 12) *I defend the harmonisation and that's where the Bologna Process is good. It forces us to be more aware of what is happening in the other countries and we have to look outside...*

Harmonisation would work if certain conditions such as those ensuring quality existed equally in all countries, or if this promoted improvements.

(Interviewer) *Erm... if the ESG guidelines had to be adopted across all the countries rather than every country having their own quality assurance mechanisms, this would facilitate recognition and the appreciation of quality across Europe ...*

(Participant 9) *Erm... in theory yes it would, wouldn't it, because we will all be doing exactly the same, eh, but if you are talking about somebody saying 'let's have a regulatory body who is looking after maintaining standards' and that would be a European regulatory body then that would sort of help to fulfil that quality and make sure that the guideline is followed. So in theory it would. I think I would need to be a little more assured about what it really would be and how much it could possible influence; because we are different and we are doing our quality procedures so whether it would just gather those up in a bag and say that is what you do... You know at the end of the day I am really not quite sure about that to be honest.*

(Participant 10) *Yes definitely, if it doesn't mean degrading but upgrading.*



Harmonisation was recognised as necessary not only across Europe but even within a country in order to avoiding dysfunction.

*(Participant 2) We went to the second model to quite a lot of harmonisation, but because we were suffering a lot from the other model ... that was so different, that even our students could not go to another university not even in the same country because the curriculum was so different.*

Bridging the gaps between different university cultures was seen as a positive influence of the harmonisation process.

*(Participant 1) And now with the Bologna Process going along, this gap between these two kinds of universities is becoming to get smaller, because the universities also have to try to fit their system with the Bologna Process.*

Harmonisation provided the peace of mind (security) for a local population to recognise the academic qualification of its practitioners.

*(Participant 2) But at least as you maybe know, for many people it is better, or they compare themselves in the same country not with others abroad, so. For many people the fact that physiotherapy is a four year education, it's the same as the other degrees in other areas.*

Harmonisation provided the platform for the delivery and discussion of common subjects.

*(Participant 2) Now from 2010 we have a core basis that is the same; there are some modules that are exactly the same on universities and then there is a percentage that is different; and this is a good thing about the system that the core things are the same but then each university has the freedom to offer some modules that are particularly relevant to the institution in particular.*

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*(Participant 6) I think it is an excellent opportunity or lever, so to speak, to get physiotherapists from all over Europe in touch with each other, discuss their levels of education, erm... perhaps get to common agendas or to see what should be achieved in education, like for example the benchmark statement which, in my opinion is a good example for international collaboration. So I regard it first of all as a big chance to learn from each other and to get into common future. It's a big opportunity to get to, at least within a certain margin, to get a common agenda of physiotherapy in the education sector.*

Harmonisation was reported to define the different levels in view of facilitating mobility.

(Participant 3) *I think at least the good thing is we are defining the levels needed on bachelor and master degree because I hope that it will in the future be easier to do exchange or to work in another country if needed.*

The threat of competition between private and public universities was reported to be more likely in the absence of harmonised structures.

(Participant 2) *... we were a little bit scared of what would happen if there is a lot of freedom to the curriculum with the private universities.*

Harmonisation was also not seen as a threat to diversity but as a process that respected and acknowledged differences.

(Participant 3) *And I also think that with the Bologna Process it is totally possible to take national factors into consideration when you build your programmes because it is always, of course, things are different in different countries in the system, in the health care structure and so on and so on. For me I do not think that Bologna is too narrow, I think that it is not too rigid, not in my opinion.*

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(Participant 4) *He or she has to have a core of competences common to everybody but it is correct, and we have to pay attention to certain differences. ... The same is when we talk about titles and level of qualification, so I think that this process started in 1999, if I remember correctly, is the main way, an important way to create a common corpus of knowledge and practice across Europe considering also the difference that are in every country, and that, in my opinion, are important that there are certain differences and that these differences are present even if there is a general framework.*

The drive for harmonisation was reported to create certain difficulties that could in themselves have acted as barriers to the process itself, making it a never ending story.

(Participant 8) *Ok, was it so that Bologna's role was to make different countries educational programme more similar, was it so?*

(Interviewer) *Yes*

(Participant 8) *In general I think it is a very positive goal but in some cases or sometimes it is very complicated or very difficult to do in everyday practice, in a practical way. On paper it is very easy, when you read it, it is very easy, but actually to develop it in a practical way, to do it, it is quite hard, because countries and cultures are very different. The possibilities, when we are talking about financial possibilities or people who are involved in the development of particular PT education, it is very difficult and different. So, I think of course, European countries must work in this direction, but when we are all following Bologna Process and the main goal is to be as similar as possible, the Bologna Process is not ending ever.*

### **7.3.6 System of credits**

Credit systems aimed to award the students with a quantitative measure of their success. In particular the European credit transfer and accumulation system (ECTS) is a specific tool that was promoted by the Bologna Process in this regard. A common credit system was actually viewed as making comparisons more equitable.

(Participant 9) *... its sounds actually a very good idea. It sounds as though it makes things the same, it makes things more equitable - you can recognise the credits that are similar across the way, so you'll have some sort of indication in your head as to what [the students have] been studying at that point, so on the basis of that it's a very good system to have.*

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(Participant 8) *I cannot say nothing bad about this. I am very neutral and I think it is very good because now we can, erm... compare our subjects or our system to other country programmes, so I think that it is very good. And the fact that we have Erasmus programme, so I think it is more easy for students and for us; when students want to take some subjects in other European countries or practical training and they have to take it in other universities, then it is more easy.*

The quantification of the ECTS in terms of defined hours has enabled educators to focus more on the students' needs.

(Participant 2) *So this is something that maybe the implementation of the ECTS helped us because we have to think on the workload of the students and not just the time we are in the classroom, like it was in the other system.*

It has also enabled the educators and students to be more critical towards the time that was necessary to achieve specific competences.

(Interviewer) *What was the reaction by the institutions, by the teachers and students to the ECTS?*

(Participant 3) *It was not that complicated because we already had a system looking at core study weeks so it only meant that it was the same thing; it was the same thing when we adopted the Euro; it was just another switch. One study week was forty hours of work and we had forty study weeks in a year before, now we have 60 credits in a year so it was taken as one and a half times.*

(Interviewer) *So was it a simple mathematical change?*

(Participant 3) *It was more or less like that, but it was not a simple mathematical thing because this in relation to the competences meant that we looked at how many hours do we really use on one competence compared to another competence. So it was not only, the system was a mathematical operation, but we really looked more deeply at the study programmes in relation to credits and competences.*

Credit systems however, have been criticised as not being clear enough to describe the achieved competence in clinical practice. As a consequence they disabled the comparative nature to which the ECTS ascribed.

(Participant 11) *And this is where I see the problems within the Bologna [credit] system, it's not ... on the academic side it is very easy to equate, in the clinical field it becomes more difficult because are we equating it by the students having reached the competence? Which is not relative to time; in other words do they have these competences?*

This sentiment was corroborated with the understanding that duration of clinical practice influenced learning. The students themselves had reported back, even though unofficially, that their confidence when addressing clinical situations was negatively affected when the duration of their clinical placement was reduced.



(Participant 11) *I actually believe that the longer a student spends [in clinical practice] the more time they have in developing and acquiring and maturing, both in the skills required and in the clinical reasoning going about. Whenever we've tried reducing placements into 3-week placements or 4-week placements the students themselves come back, and the feedback I get which is usually unofficial, is that they weren't pleased, they hadn't learnt enough, they don't feel confident in that area, it's 'hotchpotch' ...*

(Interviewer) *They need to build up the hours ...*

(Participant 11) *You have to spend time, you have to spend time, you have to, you know, you have to spend time just looking at and getting used to a system; you have to spend time with patients with different conditions.*

The decision to assign a defined number of hours to each credit is institutionally directed as promulgated by the ECTS. It appears that the allocation of specific hours to each credit (and therefore utilising time in a quantitative fashion) was not that relevant for student learning and confused the student even more, particularly when addressing their learning needs.

(Participant 3) *I don't know and I think that it's complicated in that way because we all know that one student will learn in 25 hours whilst it may take 30 hours for another student, so for me it is not that important if it is 27 or 25.*

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(Participant 1) *What is a bit difficult for the students is to understand that one ECTS means a lot of work and to translate the workload of one ECTS to the students, on one hand how many hours do we need to be at the university and how much work will this mean for me really, which I don't see in timetable from the university but just have to feel and make come true, and this is quite difficult sometimes.*

### 7.3.7 Influences on the educational system

The reported perceptions on the influences of the Bologna Process with regards to the extent of change on the educational system were various. They ranged from the recognition that change was possibly not recognised to be due to the Bologna Process; some perceived the influence as a struggle, others as an opportunity for furthering higher education, student centred-learning and student development. There were perceptions of threat and also opportunities for changes in teaching approaches and student mentality.

Unknown influences may have developed as a consequence of a top-down management approach. Teachers may have not been receptive to the reasons for change also as a consequence of the slow process.

*(Participant 10) And that of course comes from the Bologna Process; but I don't think people are aware of that and on the whole we have been working a lot with learning goals, learning outcomes, criteria and so everybody is well aware of that, all the teachers, but I don't think they know that it stems from the Bologna Process influencing the Ministry of Education which in its turn influences us.*

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*(Participant 11) I think we are lucky in that we have anticipated Bologna as a profession in our education, and I know for sure, that certain changes came about following a meeting with the Registrar of the University which slowly slowly was disseminated throughout the University.*

The influence on the structure of the programmes presented as a struggle to fit the basic entry requirements of the profession into a shorter programme.

*(Participant 10) I think we are struggling with squeezing already the four year programme into a three year programme. Everyone struggles with this and the problem with both theoretical and practical work that they have to be prepared for...*

Yet this also offered an opportunity to extend the basic entry level to a higher level with more emphasis on specialisation.

(Participant 10) ... *if we went up to five [years], then we could also have more specialisation in the fifth year.*

Shorter degrees also appeared to present with the opportunities to focus closer on student centred learning and development.

(Participant 9) ... *trying to deliver things in a short period of time in the module means also that as well as delivering those contact hours there is also that ability for [the students] to find out things for themselves as well. ... So it has had an effect on how we actually teach because rather than having all the hours that we would like we are actually constrained by the number of hours that we have; so we have to rely on students being able to find the find things out and becoming autonomous and lifelong learners themselves.*

The idea of raising the entry-level into the profession following a five-year programme, in order to accommodate for the restructuring of degrees into shorter first cycles, was perceived as a threat to the profession. As a direct consequence of this, it appeared to increase the threat of reducing numbers of physiotherapy students.

(Participant 10) *It's obvious that we will not get, the professionals will not get the salary for a five year master education to begin with, and I think that the healthcare sector is very reluctant to have a master physiotherapist because they will be too expensive in the long run; and they will be reluctant to pay a higher salary. And then we will have less students, I think.*

The restructuring of the programmes meant that the approaches to teaching had to change with teachers limiting their deliverables and students having to discover new ways of learning.

(Participant 9) *Therefore not everything related to that topic needs to be delivered. ... It has had an effect. On students it has other effect because they come to university from an A level or from school or from other areas where they have been taught everything and then they come to university and it's very different, and it's a big period of adjustment for them to begin with; to be able to then, to recognise that we don't tell you everything, you need to find it out for yourself.*

### 7.3.8 Europeanisation

The extent and impact of the Bologna Process in and across Europe was perceived also on a wider European dimension. In the view of many this has bridged the differences between the educational and practice sides of the profession to improve the health of the European patient.

*(Participant 11) ... it's nice to see how other universities including ours have implemented Bologna as far as we can; and it's brought the professions and the universities closer to each other which at the end is our final stake holder; it is the health of the patient.*

The different realities that exist in the different European countries were perceived as having been paid lip service to during the ministerial meetings. Those countries that were already set in their ways were perceived as trying to influence the general process whilst for the others it became a great expectation.

*(Participant 2) But now I think that people are a little bit disappointed with the fact that, on paper, when the ministries were meeting and so on, there were a lot of things that could be done but maybe, I think not all things were done in practice. And the economic resources were not there, so maybe, as many other areas, there were a lot of very nice documents, very nice reflections about what education is, but maybe, this was a little bit of an influence depending on the country, because maybe in some countries they were already doing the Bologna process, but for some other countries it was a kind of inspiration.*

The cultural differences across Europe were perceived to be strong enough to create barriers especially for mobility.

*(Participant 12) As I said I think it's a, it's a positive. Only the countries are doing it in a different way which is understandable. We have our own specificities, but I'm not sure if this is going to create the easier mobility that we are looking for.*



One aspect that was reflected strongly was the dialogue that developed between European countries, which was facilitated by the discussions on common themes of the Bologna Process.

*(Participant 2) I really think that during the years we were talking about new methodologies and the Bologna Process, the ECTS, I mean at least we had topics to talk about in the conferences, and at least we had a common structure. We could complain about the structure, but it was common for everybody.*

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*(Participant 4) Well, this process is a good way to allow people, students, teachers and professionals to talk with one another and exchange ideas, comments and concrete activities in order to have a common background ... But the Bologna Process, in my opinion, is very important. For the first time in many years, from the foundation of the European community, we have a framework to talk with one another on a common basis.*

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*(Participant 6) Once again I look at that as a big chance which we can seize and make good use of or not, erm... I think it is an excellent opportunity or lever, so to speak, to get physiotherapists from all over Europe in touch with each other, discuss their levels of education, erm... perhaps get to common agendas or to see what should be achieved in education, like for example the benchmark statement which, in my opinion is a good example for international collaboration. So I regard it first of all as a big chance to learn from each other and to get into common future. It's a big opportunity get to, at least within a certain margin, to get a common agenda of physiotherapy in education sector.*

The Bologna Process also served to exert political pressure to implement changes that reflected the wider European dimension.

*(Participant 6) ... this is one example how we can use the Bologna Process to convince people that a Bachelor programme must be a qualifying programme ... because otherwise it would somehow split up the whole Bologna idea. So we can use it in political discussions and that is why it is very helpful.*

The engagement of practicing foreign physiotherapists in different European countries had to be considered.

*(Participant 9) because what is happening in Europe has an effect on the potential employment of our graduates...*

The Bologna Process was also relevant for countries to match similar practices in other European countries.

*(Participant 8) It is definitely important because as I mentioned before ... for us it is very important to follow the same directions and the same framework as other European countries.*

### **7.3.9 Generally reported important changes**

A number of important changes that were directly influenced by the Bologna Process were reported by the participants. These changes appear to have had an overall influence on curriculum development, mobility, transparency, strategic decision-making, recognition, aspirations and the levelling of national internal differences.

Curriculum development was challenged to be more competence-based through the creation of avenues for further and higher academic development, especially in those countries where this was not possible before the signing of the Bologna Declaration.

*(Participant 1) Now there is a definition that our alumni or the new physiotherapist has to have competences in research but each and every university of applied sciences puts numbers and working hours to it as they go - and they give working hours and ECTS for bachelor work and for seminars working up to the bachelor work. So this has changed quite dramatically.*

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*(Participant 2) What was nice for physiotherapy was that the Bologna Process gave us the possibility to be considered as an educational degree on the same level as biology, geography, medicine and all, and in the other way it gave us the possibility to go further to Master and PhD and our students they don't have to go and study other degrees in order to have a possibility to go for a PhD.*

Important changes were recognised with the implementation of the Bologna structures that facilitated mobility for the graduate student.

*(Participant 1) I think it's also easier now for us, as it was for me, to migrate within Europe if I have a bachelor's degree and it's telling exactly 180 ECTS, I have a Diploma Supplement telling the other university exactly what is going on in my university. I think it's becoming much more easier. Before it was really really difficult.*

The Bologna Process served to facilitate the transition towards more transparent systems that highlighted and clearly described the education levels and learning goals for the students.

*(Participant 10) Well for us it has meant that, for our country it has meant that we need to be more transparent when it comes to describing our level of education and erm... and also to be more specific in the learning goals and criteria for achieving these learning goals, so I think that has been the most important aspect of the Bologna Process. ... we are more observant on learning goals and learning outcomes and criteria for exams; and that comes actually from our Ministry of Education, that they demand clearer criteria and clear learning goals in our course descriptions and also in our actual carrying out of the course.*

The engagement towards more active strategies that enhanced the students' chances of success was emphasised.

*(Participant 2) Now, what we try is to make the student more conscious that he is in a process of education but this is not the end.*

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*(Participant 3) I really think it was good thinking of learning processes. It was a way to facilitate the learning processes to be more student-focused than teacher-focused.*

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*(Participant 8) Yes, (our) University went over to an outcome-based learning. This is also the huge change we had.*

The aspirations towards change were reported to be met with eagerness. Such change was made possible because of the Bologna Process but more importantly it was European led. It also served to resolve the internal academic differences within certain countries that previous to the Bologna Declaration were evident across different regions.

*(Participant 2) For us, this process of Bologna came with a lot of aspiration of changing; so in fact for physiotherapy in C2 it was the same if it was called Bologna or New Law of Education. Physiotherapy wanted a change and this was perfect. It came from Europe so it was not us, it's all physiotherapists who want to change, and it's from Europe; perfect we used that for ourselves, so in our case it goes together with the changes.*

(Participant 4) *I think that without the Bologna Process this could not happen in C4. Before there were great differences amongst schools not only between north and southern schools but also amongst schools in the north there were important differences. So I think that the Bologna Process for us was, and is very important because it gave us the possibility to start this path towards general directives in Europe.*

### **7.3.10 Changes not associated to the Bologna Process**

The participants did recognise that certain changes in their educational system had not resulted as a consequence of the Bologna Process. The structure of the degrees as promoted by the Bologna Process was already in place in certain countries so this was not viewed as having had any organisational influence.

(Participant 10) *Because regarding the organisation it hasn't changed anything; I mean we are and we have always been on an academic level and we are, on that level the Bachelor level, we are regulated centrally to the level and the content of the programmes in the whole of C10; and we already had a 3-year programme followed by a 2-year master level programme so it hasn't changed anything concerning the organisation.*

Certain drivers for change particularly on professional development had been directed by the desire to match the growth in other professions.

(Participant 3) *I think that we did not have any bigger changes in the structure of a study programme and so on, but what I think that we have been doing in physiotherapy in the last year is that we have been more aware of the need of having leadership, management, development competences in the programme; and that maybe is not the result of Bologna, it is more a result of seeing the need in relation to other professions like doctors and nurses and so on, so we want to be the leaders and the developers of our own profession and our own outcome.*

The economic turmoil that had affected Europe resulted in universities adopting new national reforms based on cost-cutting measures. This resulted in a re-planning of academic activities with two consequences. The first that the quality of education suffered due to a further reduction in teaching hours and second, as a consequence of the first meant that the staffing levels were being reassessed resulting in teachers feeling threatened by this.

(Participant 4) ... instead of talking about 4 years education for a bachelor we are now facing with two years, so, even if the reform of the Bologna process is positive and it is positive because students and teachers begin to change their ways of learning and teaching, but if you do not have the possibility to keep a critical level of time, also these ways of interpreting teaching and learning become critical. This is our concern about the (national) reform. ... The reform is based on the necessity to save money in a general way and the government cuts many things and also in the field of education and research in an important way, unfortunately in C4 and so this implies a re-planning of activities in an important way but with the severe risk of not being able to serve the quality that is always declared and this is our concern. At the moment this is the situation.

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(Participant 2) What I think generally in Europe is a little bit more, how could I say, people are a little bit more scared about the position themselves, the position they have because erm... I feel that the economical difficulties sometimes make the universities not require so many teachers or erm... some teachers I feel are scared of losing their job; and this is something that I did not feel before. I don't know if it's exactly related to the Bologna Process or just related to the fact that a lot of universities were being created in the last years and now the states cannot afford to have such a lot of universities.

Another consideration towards the influence on physiotherapy education was attributed to the national registration councils that served to rubber stamp and approve the course programmes for the recognition of a professional title.

(Participant 9) It would be very useful to know that other universities or other institutions were having to work to the same standards that we are doing, because it is a lot of work, but it does produce at the end of the day something that is valuable and is valued and it's recognised within the C9; that you are registered because you have been through a course that is approved by them. So it is almost, erm... a rubber stamping of what you are actually doing and the approval of what you are actually doing. So if that could be the same across Europe then we would know that we're all... we've got similar quality assurance processes in place, and everybody is working to the same standard.



### 7.3.11 Perceived influences of the Bologna Process

The participants' view on the influences of the Bologna Process on physiotherapy education were explored. Their views were grouped into five broad categories as outlined in box 7.2. Direct influences were reported on a number of issues, such as the duration of programmes, transparency, methods of assessment and teaching, teachers, contextualised education, professional and educational equality, quality, comparability and harmonisation, general governance and also communication (see box 7.3).

BOX 7.2: FIVE CATEGORIES THAT SUMMED UP THE VIEWS ON THE INFLUENCE OF THE BOLOGNA PROCESS

1. Direct influences
2. Relating the influences back to the Bologna Process
3. Comparisons to other continents
4. Political influences
5. Financial limitations

1. Duration of programmes
2. Transparency
3. Methods of assessment and teaching
4. Teachers
5. Contextualised education
6. Professional and educational equality
7. Quality
8. Comparability of programmes
9. General governance
10. Communication

BOX 7.3: THE DIRECT INFLUENCES OF THE BOLOGNA PROCESS AS EXPRESSED THROUGH THE VIEW OF THE PARTICIPANTS

A direct influence was reported on the duration of programmes that involved the first and second cycle (otherwise known as undergraduate and postgraduate education) that in one way or another created a disadvantage for the student either in terms of the length of study or the content.

(Participant 11) *We have chosen to remain with a four-year undergraduate course. In this case our students are at a disadvantage, whereas in the rest of Europe it is either a 3+2 or a 4+1 in C11 it is a 4+2, so if they want to go to a Masters level we are talking about six years of education.*

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(Participant 10) *That was a result of the Bologna Process that the result was that the post-graduates master level was prolonged to 2 years, yes. ... Yes I think so. It's a bit short though. A three year programme is a short programme but that's the agreement in the Bologna process, so.*

(Interviewer) *It could be four. Why should it be three? I do not understand.*

(Participant 10) *Well, for us it's three because that's our structure. A bachelor programme is a three year programme, no matter what you are studying.*

(Interviewer) *But it is not because of the Bologna process, it is C10.*

(Participant 10) *Yes, that's our system that already existed, so as you're saying we have a good system, yes, we have a good system but our physiotherapy education is a bit short.*

(Interviewer) *If you had to take it up to four, you'd still be in line with the Bologna...*

(Participant 10) *I know. That's our point, why take it up to four rather than go straight for five years and then make it a master instead. It's a bit stupid to stop at four.*

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(Participant 8) *I think one of the most influences or the issue is that because of the Bologna process the study period is quite short and the study programme must be very very focused, because after three years graduation they have a possibility to enter the work field already as a so-called independent professional already and that's why the study programme must be at the same time very focused and possibly very general.*

The Bologna Process was perceived to make the educational programme more transparent, meaning that the universities in any particular country could know what was happening in other universities in the same country; and also in universities in other countries. It also enabled the competences required to complete a degree to be clearly described.

(Participant 11) *We talk about a process whereby education becomes more transparent, whereby education becomes more transparent not only within a country, so between the universities within a country, but within Europe as a whole. We saw the introduction of a credit system which is something we had been asking for in the past which almost ran but we didn't call them ECTS, we called them credits. The value was different but we still had a system so it was almost a mathematical changeover.*

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(Participant 3) *I think that we had at least, the problem was not the level of education; we had a good level of quality already before the Bologna process but the main influence when looking at the studies and the study programmes was the idea of identifying and describing competences, to not only having aims for courses but to really describe the competences required when you get your exam.*

The Bologna Process had an influence on the choice of the method of assessment and teaching. In particular this was noted to shift such methods towards a more student-centred approach.

(Participant 11) *The manner of assessment changed, in other words instead of having each individual topic assessed, a lot of them began being grouped into modules and being assessed and carrying a heavier weighting. We saw and are seeing a slight change from the typical medical model to a more social model to a more competency based model of education which directly and indirectly linked to Bologna.*

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(Participant 3) *I really think it was good thinking of learning processes. It was a way to facilitate the learning processes to be more student-focused than teacher-focused.*

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(Participant 4) *You can see and appreciate a change in the way of dealing with teaching and also the way of delivering the learning. Students and also teachers are more confident and more conscious about the necessity to change the attitude towards teaching or learning. Erm... in my opinion, it is quite evident that this consciousness is more applicable, is more evident. And if I compare the situation now with the situation of some years ago, this is a point that could be considered risky, because referring to the Bologna Process is a constant point also by teachers and students. One of the great changes for students is that they are more conscious about the necessity to exchange with students from other countries, or to attend courses in other countries with the Erasmus programmes for example, and they want to be informed about the differences of the levels of qualification or about also the difference in programmes between our course and for example in the Netherlands or*

*elsewhere in Europe. They are more conscious about the importance of reaching a preparation according to a more general view.*

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*(Participant 8) Yes, (our) University went over to an outcome-based learning. This is also the huge change we had.*

The teachers and lecturers were obliged to reflect on different and innovative ways of teaching and learning but this did not necessarily happen at the same pace as the changes were perceived by the students.

*(Participant 12) we are more forced to reflect in three different ways as teachers in all the team. First 'the what is physiotherapy at the moment' and what we needed to change in our curriculum to be at the European level. The second was about the learning strategies. That was the big big reflection we needed to make in our institution, erm... so we changed the learning strategies as a team. We have been, erm... learning how to teach. That was a big .. a big change and the other one was to have a curricular plan more flexible. And we needed to also, as a team to develop a flexible course. We are able to create mobility for the students.*

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*(Participant 4) Some teachers are confident with this view or system but in my opinion the students are more conscious at the moment if we compare them with the teachers.*

The Bologna Process served to put education into context and to address the areas that required development.

*(Participant 12) We increased a lot [of hours in clinical practice]. That's one of the demands of the Bologna Process, to have a contextualised education, ahh, and that we did so. In that it had quite an influence.*

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*(Participant 3) ... the problem was not the level of education; we had a good level of quality already before the Bologna Process but the main influence when looking at the studies and the study programmes was the idea of identifying and describing competences, to not only having aims for courses but to really describe the competences required when you get your exam.*



The Bologna Process was perceived to be the engine that restored social equality for the physiotherapy profession including the perspective of education.

(Participant 4) *I think that without the Bologna process this could not happen in C4. Before there were great differences amongst schools not only between north and southern schools but also amongst schools in the north, there were important differences. So I think that the Bologna Process for us was, and is very important because it gave us the possibility to start this path towards general directives in Europe. ... We had reached in 1994 the possibility to have a law that described the competencies of a physiotherapist and so that was the first important recognition of our autonomy and our profession, but this is a professional perspective. From an educational perspective the important step was the introduction of schools at a University. And this was possible with the Bologna process.*

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(Participant 7) *Yes. I'm convinced that it's a good thing; that it gives new opportunities; that our profession will be better recognised; that we actually form a profession which we haven't really had before but it takes time.*

The Bologna Process served to introduce the necessary quality assurance mechanisms.

(Participant 12) *C12 didn't have a good system on quality before. And that changed a lot with the Bologna Process. Ahh, both the educational ministry and the educational institutes, erm... we have been developing the right instruments according to the EQF.*

(Interviewer) *As a result of the Bologna Process?*

(Participant 12) *Yes.*

The comparability of degrees was made possible through the Bologna Process as universities engaged in certain practices such as issuing the Diploma Supplement.

(Participant 3) *I think that at least it was very important to look at both the levels of education but also at the workload if you are thinking about the content of the programme. Of course, very important, was the whole idea of having the Diploma Supplement and all the course descriptions in English and so on; so it made the schools more international and also more, let me see what the right word is, harmonised... maybe ...*

(Interviewer) *Comparable?*

(Participant 3) *Yes that is the right word.*



The Bologna Process had an overall influence on other aspects of governance that were not exclusive to the Bologna objectives, such as the internationalisation of the university through the exploitation of English as a language.

*(Participant 3) For example, every school uses the ECTS, the diploma supplement and so on; and I also think that it has been more international. At least at our school we have all the study programmes in English also so that people from other countries can look at what we are doing; and also for example looking at the EQF, we have a national qualification framework based on that.*

The Bologna Process was seen to influence better and effective communication between different universities, that created a common discussion in order to evaluate what was happening in the rest of Europe.

*(Participant 4) But the Bologna process, in my opinion, is very important. For the first time in many years, from the foundation of the European community, we have a framework to talk with one another on a common basis.*

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*(Participant 5) I think it's a must; it's good to have that helicopter view to see what every country is doing and to get it on the same level for communication.*

The same direct influences of the Bologna Process on the physiotherapy profession were perceived to make the link with the other academic professions and also the wider influences difficult, in the light of the Bologna Process itself.

*(Participant 11) You see, Bologna is a big umbrella if you want, and then you have each profession which falls under the big umbrella, but then each profession has its own knowledge base, if you want. So it's very difficult to equate a profession like physiotherapy to the very big umbrella.*

The Bologna Process was necessary to create a continental identity that could be compared to other continents, particularly Australia and the United States of America.

*(Participant 5) I think that it is a must, that there is an overview of sides of how we do it in Europe in relation to Australia or America. I think it's a must...*

The Bologna Process served as a political tool to influence decisions that would serve to match education/professional systems such as entry-level qualification, even if this meant having to adapt to different methods.

*(Participant 6) Well Bologna, the whole process is immensely helpful, erm... because we can use it as a political instrument. Now the thing is that the politicians and the administrators, they could say "we don't care about Bologna because physiotherapy is supposed to stay at diploma level so it is not university based at all, so why does the Bologna Process affect it?"*

*But then again, sometimes the developments in the real world are faster than legislators or administrators can, well, stamp them or can keep them from happening or can avoid them. And this applies to physiotherapy because it already has come to universities, through the back door perhaps, as it is, well there are a lot of precedents and they can't be fought back into the sea.*

*Erm... and now of course this requires a new kind of shaping the landscape of education.*

*And this is one example how we can use the Bologna Process to convince people that a Bachelor programme must be a qualifying programme ... because otherwise it would somehow split up the whole Bologna idea. So we can use it in political discussions and that is why it is very helpful.*

*And also the Bologna Process made clear that everywhere in Europe, physiotherapy professional qualification programmes are on bachelor level...*

*You see it's a change, it's a shakeup of our system and change always means that conventional ways of doing things are threatened. People who have established themselves in this system will find it difficult because they need to accommodate to the change somehow, it will require an adaptation, and it could also mean a threat to how things were done so far.*

Finally, the direct influences of the Bologna Process were perceived to be limited by the financial constraints that ultimately reflected the decisions. These were not always taken on what was better but on what was more financially viable.

*(Participant 9) What happens currently in Europe is very interesting, but, it doesn't have a major impact on what happens in the C9 in terms of physiotherapy education. We've implemented things like the diploma supplement, we've implemented the core ideals of the Bologna Process in terms of lifelong learning and student autonomy, those sort of things, and they're part of the way we actually teach students, but the things about erm... the length of the course, the time that people spend on different modules, how they actually manage to come to the end point of graduating, doesn't have a*

*major effect on what we do because we are limited by what we are allowed to provide. So I think it's a financial thing mainly that we can't have four year courses as maybe on the continent. We have to make sure that they are either at least 3 years no longer erm... but the basics of the precepts of Bologna are already implemented, in that we've got the student centred, we've got the widening access, we've got lifelong learning in there but it's on a very different sort of basis to what is happening in Europe.*

### **7.3.12 Misconceptions, misunderstandings and misinterpretations**

There were some issues that did not fully reflect the underpinnings of the Bologna Process. These were related to the duration and organisation of programmes, mobility and the value of the credits within the ECTS. Reference was made to the duration of the doctoral level as a precept of the Bologna Process.

*(Participant 10) ... we are not on a 3-year research study programme yet, we have 3+2+4 in C10, whereas the Bologna Process says 3+2+3 actually.*

There was reference to the duration of mobility programmes within the Bologna paradigm as being established at 10 weeks.

*(Participant 5) And then there is a little bit around the organisation. Bologna says we have to do it in 10 week blocks and then some schools do it more or less; but I think that's one of the organisational things that come from Bologna. ... Bologna says that if we have to exchange students then we have to make all 10 week blocks and then exchange is easier.*

The value of 1 ECTS was attributed to a definite decision by the Bologna Process. In this particular instance, the response was provided by a third person, an accompanying educator, in support of the response by the participant, who did not stand in to correct the comment.

*(Interviewer) How many hours are acknowledged for 1 ECTS?*

*(Participant 5) 28 hours is 1 ECTS.*

*(Interviewer) Ok, how come 28? Other countries are not happy with the 28?*

*(3rd. person) It is because of Bologna.*

### 7.3.13 Mobility

Issues concerning mobility featured in the interviews. The participants had various comments to make on mobility that are listed in box 7.4.

1. Difficult process
2. Influenced by the degree structure
3. Favourable conditions facilitated mobility
4. Bologna Process guided decision
5. Influenced personal and professional development
6. Life learning experience
7. Not so favourable conditions

BOX 7.4: THE ISSUES ON MOBILITY  
THAT FEATURED WITHIN THE  
INTERVIEWS

Whilst hypothetically the Bologna Process served to facilitate mobility, in reality it resulted that a number of factors made the process a difficult one, such as ensuring that the learned outcomes and competences gained abroad had to match those in the home country.

(Participant 1) *I think it's also easier now for us, as it was for me, to migrate within Europe if I have a bachelor's degree and it's telling exactly 180 ECTS, I have a Diploma Supplement telling the other university exactly what is going on in my university. I think it's becoming much more easier. Before for [us] it was really really difficult.*

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(Participant 9) *If we did [send out our students on an exchange programme], we would need to make sure they would have to fit what the [regulatory council] are asking us to say is going to create a person who can be put on the register. And I think that is the quality system; that we would and may struggle with, particularly because they need, when they come back to the C9, to get on the register; that course that they go on or that time they spend out has got to be backed against what we actually do here.*

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(Participant 1) *What is still difficult is that our law is very strict on the competences. Our students have to have, after their training, after their bachelor degree, and we have to choose very very carefully, now with the curriculums, to be able to offer our students a full semester to go out.*

Further restrictions towards mobility were also noted due to the shorter duration of the degree meaning that there was little time for students to catch up on any competences that were not addressed throughout the mobility period.

(Participant 1) *We have a short degree; and if there is for example, a comparable programme but then there is one competence not within the semester, the student would still have to fit in this one class when he comes back, and that is almost undoable.*

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(Participant 9) *... even though we might like to get them out, because of the nature of what is being asked for in Erasmus, then we don't have the time to send them where they might like to go.*

The participants spoke of certain conditions that were necessary in order to make the mobility more favourable, both for teachers and the students. The use of the English language as a language of instruction has been noted.

(Participant 10) *Teaching or teacher exchange has been more successful in that it's easier for one of our teachers to go out and teach in English and vice versa to get a teacher from another university to come and teach in English.*

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(Participant 2) *... and in Scandinavia it is an option because of the language, students want to go to Scandinavia because they can practice English.*

The Bologna Process has helped and guided decision-making processes in the evaluation of mobility programmes.

(Participant 10) *The Bologna Process has helped some when it comes to decide upon exchanges with other universities.*

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(Participant 2) *And for mobility I think it was Erasmus, it's a very powerful programme, but here with the Bologna process it allowed you to find sense to the Erasmus project; it's like, ok Erasmus is there but now we understand that it is not just going abroad to study for a semester, you can finish your studies in another university. So, I think it was positive to mobility.*



Mobility, facilitated by the Bologna Process and other European initiatives, was seen to improve the personal and professional development of the students. It was not so important to decide where to participate in a mobility event as it was the life learning experience that was perceived to be a priority.

(Participant 11) *It is very healthy for us. It is better than good. It is healthy. The changes that we have seen and thank goodness for the Bologna Process and the funding that comes via Erasmus is that the students mature both academically, professionally and also socially and individually. This is it. So this mobility works in more than one way and that is why I say that it is healthy.*

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(Participant 2) *Exchange is not so related to the fact that this is a very good school, and I want my students to be there; it is more like it's ok, we have an agreement and it's fine, it is not like we want our students to go to La Sorbonne because it is the best; it is just for the students to get experience abroad and that's all.*

There were situations that could potentially hinder the success of mobility periods such as when a specific outcome was sought that could not be met.

(Participant 8) *I cannot say that mobility isn't good, of course mobility is always good, but in some cases when you are looking very specific and you want to learn something very specific it is so that you are not getting it.*

### 7.3.14 Negative aspects

The participants also expressed their concerns regarding the Bologna Process. These are listed in box 7.5.

Box 7.5: CONCERNS EXPRESSED BY PARTICIPANTS TOWARDS THE BOLOGNA PROCESS

1. One-size-fits-all
2. End users not always aware
3. Poor attitudes relinquishing change
4. Tight and strict regulations
5. Bureaucracies and misinterpretations
6. Personal insecurities
7. Costs of change
8. Economic influences on quality

A one-size-fits-all model was understood to mean that there was little chance of developing different or alternative models within the same country even if for a particular profession, such as physiotherapy, it was felt that a longer course was more appropriate.

*(Participant 1) So even so, all the physiotherapists who would want 7 or 8 semesters for the basic physiotherapy training to bachelor level and for the entry into the profession, we can't really make it, do it, because the law says it has to be in six semesters.*

Teachers were not always aware or updated with the requirements of the Bologna Process, making it difficult for them to understand what was going on and to adapt to the new realities.

*(Participant 1) ... to translate bologna process to all the lecturers and the normal physiotherapists, to explain what could be the niceness of the bologna process ... because for sure it's a very strict system so you have to have ECTS, and you have to fit in with your working hours, and you should not have 0.5 ECTS, and so stuff like that, and even now when you come out with modules - we put in a lot of lectures within one module and to make it an examination over one competence or in one module, this is very difficult sometimes to understand when you're not really in depth in the system.*

A feature that promulgated a negative impression was noted in the participants' perception towards the poor attitudes of those persons who were relinquishing the opportunity for change.

*(Participant 1) It's a way or it's a tool actually that we could use to get some of our politically professional issues to get to move. But I don't know if everybody thinks like that about it. And I sometimes, when I just talk to another degree programme, they just think 'why, it's all bullshit!' Because now we have to say exactly what we are doing and we have to define learning outcomes ... and I am much more a pragmatic person and I say 'ok!', then I have learning outcomes and I think about how I can measure them and I know exactly what I have to tell my lecturers, what the lectures have to be about, in the end what is the competence for our students.*

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(Participant 6) .. *this is one example how we can use the Bologna Process to convince people that a Bachelor programme must be a qualifying programme ... because otherwise it would somehow split up the whole Bologna idea. So we can use it in political discussions and that is why it is very helpful. And also the Bologna Process made clear that everywhere in Europe, physiotherapy professional qualification programmes are on bachelor level with the exception of C6.*

The rigidity of the structures together with the strictness of the regulations resulted in a position that did not allow any compromise. This made slight alterations to the programmes unattainable.

(Participant 1) *What is still difficult is that our law is very strict on the competences. ... We have a short degree; and if there is for example, a comparable programme but then there is one competence not within the semester, the student would still have to fit in this one class when he comes back, and that is almost undoable.*

The bureaucratic developments, especially those linked to administrative work, and also misinterpretations of the Bologna directions had the potential to lead to poorer practices and inferior quality.

(Participant 12) *Because of the reformulations made, they were again more administrative, erm... than in the quality of the strategy or content. And the main interpretation or misunderstanding of this Bologna Process was that the learning should be centred on the student and the teachers don't have to invest so much. And some changed all the curricular plans according to this philosophy, and that didn't work so well.*

The academics in particular, welcomed the changes to the educational system at a professional level but they were less keen towards the changes imposed on them at an individual level.

(Participant 2) *People are happy with the education in physiotherapy but not so happy with many changes that affect them particularly.*

Changes were perceived to come with a cost, and in this case the cost of becoming more autonomous in learning styles brought with it the risk of losing the critical levels required for adequate learning.

(Participant 4) *In a certain sense this could be the system that may give the student the chance to develop in a more autonomous way what they are studying, but if we consider that our profession implies a great amount of practice, clinical practice and training, maybe this could be in our opinion a critical point because the reduction of the hours spent in the room may have a certain importance. If we talk about biomechanics or about clinics or about therapeutic approaches then this reduction may have important consequences in a negative way. This is the reason of our apprehension because students will surely be more involved in their personal study but this also implies certain risks. ... even if the reform of the Bologna Process is positive and it is positive because students and teachers begin to change their ways of learning and teaching, but if you do not have the possibility to keep a critical level of time, also these ways of interpreting teaching and learning become critical. This is our concern about the reform.*

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(Participant 11) *And this is where I see the problems within the Bologna system, it's not ... on the academic side it is very easy to equate, in the clinical field it becomes more difficult because are we equating it by the students having reached the competence, which is not relative to time, in other words do they have these competences, therefore ...*

The economic influences and the general trend to reduce budgets in the more recent years implied certain reorganisation of activities that could seriously affect the quality of education.

(Participant 4) *The reform is based on the necessity to save money in a general way and the government cuts many things and also in the field of education and research in an important way, unfortunately in C4, and so this implies a re-planning of activities in an important way but with the severe risk of not being able to serve the quality that is always declared and this is our concern. At the moment this is the situation.*



### 7.3.15 Obstacles to development

A number of barriers were identified that obstructed the development of physiotherapy programmes and these were linked to the degree structure. Funding opportunities differed between different institutions according to their status (university vs. university of applied sciences). Strict comparisons looking at hours or competences for mobility recognition, the different credit values assigned to different curricular units and the lack of knowledge of the Bologna Process were all reported and these also acted as obstacles to development. The state funding of the physiotherapy degrees provided the opportunity for basic and/or further and more advanced education. When the funding to the University of Applied Sciences was limited to bachelor programmes only, this effectively meant that master and doctoral programmes were rendered impossible to organise.

*(Participant 1) Beforehand the academies of physiotherapy, the money came always from the province. Then it changed to the universities of applied sciences. Now the money still comes from the province, just going to the university and not from the big pot where all the universities and the other degrees of the universities of the applied sciences are paid from. That money comes from the Ministry of Education and Science. So our money still comes from the province. Now the province says: "we have a legislation which tells us we have to educate people to become physiotherapists; we have a bachelor degree, these people are allowed to work as physiotherapists so we have fulfilled the legislation. We are not responsible to pay for master degrees."*

The rigidity of the British and French systems in recognising professional qualifications by the way that they had to meet very specific requirements, especially in quantified aspects of time, was perceived to hinder the process of professional mobility that went against the spirit of the Bologna Process.

*(Participant 10) If you talk on mobility on a professional level after having completed education, at least the entry level, then there are still great problems with Great Britain and France who demands the number of hours. I wouldn't be amazed if they ask for the minutes that the students have been taught a certain subject; and that is so foreign to both the Bologna Process and to our way of educating our students. The number of hours the students have listened to a lecture does not say anything about the learning outcome; they could have slept the whole time in our opinion. So, but it's a problem that our former students often have when they want to work in Great Britain.*



Recognition of the learning experience that was acquired away from one's university presented a problem when the number of credits awarded in the other institution under-matched the number of credits awarded for the same subject in the home institution. Students had to repeat the entire unit in order to achieve the remaining credits.

*(Participant 12) ... so we need to credit them here, erm... and then I find different, erm... in between institutions in C12 and also in Europe. In a few places you will get all the 60 credits, in another place you don't get all the 60. And this for me, at the moment is a problem. And that the Bologna is looking for that. That we can have the credits of all the things we did before. But I'm not sure that all this is happening. We have a problem in C12 at the moment about, I'm not sure how to say this in English exactly, and, erm... partial credits, if I have a curricular unit with 10 credits for example, the students need to come, and if they have the credits, if they have 10 credits for it. If they have only 8 they don't get the credits for the curricular unit and they will need to repeat the whole curricular unit.*

A similar sentiment was expressed when the learning outcomes delivered in a foreign university did not meet those at home with the consequence of the regulatory council finding difficulty to register the graduate to practice.

*(Participant 9) mmm... It's one of the things that we are coming up against as we try to send students out on Erasmus because even though we might like to get them out, because of the nature of what is being asked for in Erasmus, then we don't have the time to send them where they might like to go. So we do have difficulties with that. But we haven't as yet, we haven't thought about anybody going overseas for a full year. If we did, we would need to make sure they would have to fit what the [regulatory council] are asking us to say is going to create a person who can be put on the register. And I think that is the quality system; that we would and may struggle with, particularly because they need, when they come back to the C9, to get on the register; that course that they go on or that time they spend out has got to be backed against what we actually do here.*

Another obstacle to further development of the Bologna Process was expressed through the possibility that teachers would not know that their engagement in certain practices was the result of the Bologna Process. This happened when the dissemination of information took a long time to get across to the teachers; and also if the teachers were unsympathetic towards the reforms.

(Participant 9) *I think that [the teachers] are autonomous in what they actually do, so they can choose, but to a certain extent it's also that fact that it comes down to the top - so it comes down to the vice-chancellors who then disseminate this information, erm... and then it takes time to build it down to the people who might be actually implementing it to physiotherapy level. ... It just takes a bit to time to get the information through and it doesn't come down to staff on the ground somewhat, unless they are absolutely fascinated by it. They would know about the precepts - if you would talk about the lifelong learning they know about that principle, they know about student centred learning and they know about student autonomy; all those things but they possible might not link it to the Bologna Process.*

### 7.3.16 Perceived threats

The implementation of the Bologna Process was perceived at times to reflect a threat to the established minimal standards; even though these threats may not have materialised. The perception of these threats was reported to be attributable to multiple contemporary discussions on the Bologna Process that may have resulted in the desire for different and conflicting aspects.

(Participant 4) *Also when referring to the European and world standards of physiotherapy we look in a very positive way to the fact that the student has to be more autonomous and the fact that the teacher has to change the way of teaching, but a certain level of concrete hours in certain topics has to be to ensure the right quality.*

*... if the reform of the Bologna process is positive and it is positive because students and teachers begin to change their ways of learning and teaching, but if you do not have the possibility to keep a critical level of time, also these ways of interpreting teaching and learning become critical.*

----

(Participant 1) *Before we had 2000 hours [on clinical placements] within three years, which is a real high number, now we have minimum of 1250 hours in the three years of university training. And this was one of the big discussions within [our] physiotherapy community, that now, our new [graduates] they will not be as good as before with the patients - which is a threat which was not really proven by the first 2 years of new physiotherapists coming out of the universities... Bologna itself, the idea is good, sometimes the translation of Bologna, I think that's the problem sometimes. That people talk about Bologna and they talk actually about 10 or 20 different things and I think it's a bit in C1 definitely the problem - we understand different things from Bologna and we want different things.*

The perception of threats was also addressed towards those aspects that could alter established practices and which would result in the dampening of enthusiasm.

*(Participant 6) You see it's a change, it's a shakeup of our system and change always means that conventional ways of doing things are threatened. People who have established themselves in this system will find it difficult because they need to accommodate to the change somehow, it will require an adaptation, and it could also mean a threat to how things were done so far. So the enthusiasm about it could be limited.*

### 7.3.17 Positive aspects

The Bologna Process did leave positive impressions on the participants in a number of areas as outlined in box 7.6.

1. Upgrading in the education levels
2. Opportunities for improvement
3. Clear and harmonised framework
4. Reflection on engagement and practice
5. Opportunities for better recognition
6. Implementation of quality
7. Widening discussions
8. Changing aspirations

BOX 7.6: POSITIVE ASPECTS  
EXPRESSED BY THE PARTICIPANTS  
TOWARDS THE BOLOGNA PROCESS

It was reported that the Bologna Process was influential in upgrading the level of physiotherapy education and also provided physiotherapy graduates with the opportunities to pursue further education in the same field.

(Participant 1) *Without Bologna we wouldn't be at the universities of applied sciences, so that's the big point why I love Bologna.*

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(Participant 2) *But what was nice for physiotherapy was that the Bologna process gave us the possibility to be considered as an educational degree on the same level as biology, geography, medicine and all, and in the other way it gave us the possibility to go further to Master and PhD and our students they don't have to go and study other degrees in order to have a possibility to go for a PhD.*

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(Participant 4) *From an educational perspective the important step was the introduction of schools at a University. And this was possible with the Bologna process.*

The Bologna Process provided the platform for physiotherapy education to pursue opportunities to develop that were previously limited, or opposed to by factions, particularly the medical practitioners.

(Participant 2) *... the Bologna Process for physiotherapy was just a wonderful excuse to develop most of the things that we wanted to do before and the Ministry didn't hear from us because amongst other things they had a lot of pressure from the lobby groups, rehabilitation doctors and so on.*

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(Participant 4) *You can see and appreciate a change in the way of dealing with teaching and also the way of delivering the learning. Students and also teachers are more confident and more conscious about the necessity to change the attitude towards teaching or learning. Erm... in my opinion, it is quite evident that this consciousness is more applicable, is more evident. ... Of course there is also the other side of the coin, because this reduction also implies the fact that the teachers have the necessity to change their way of teaching and the teachers will be asked to cut some things are prefer some aspects over others. We hope they will be able to stimulate the student to go deeper in some fields and so stimulate his or her autonomy. So also the way of teaching will change.*

The Bologna Process provided the means to establish clear and harmonised administrative structures that facilitated transparency but at the same time allowed diversity.



(Participant 1) *For me working with ECTS and working hours is just, erm... giving me a clearer picture of what has to happen within one semester and one year and within the three years...*

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(Participant 2) *It is a positive experience in a way that now we know better what others are doing and we can organise better the work for the students. ... Now from 2010 we have a core basis that is the same; there are some modules that are exactly the same on universities and then there is a percentage that is different; and this is a good thing about the system that the core things are the same but then each university has the freedom to offer some modules that are particularly relevant to the institution in particular.*

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(Participant 4) *I think that this process started in 1999, if I remember correctly, is the main way, an important way to create a common corpus of knowledge and practice across Europe considering also the difference that are in every country, and that, in my opinion, are important that there are certain differences and that these differences are present even if there is a general framework.*

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(Participant 8) *I am very neutral and I think it is very good because now we can, erm... compare our subjects or our system to other country programmes, so I think that it is very good. And the fact that we have Erasmus programme, so I think it is more easy for students and for us; when students want to take some subjects in other European countries or practical training and they have to take it in other universities, then it is more easy.*

The Bologna Process obliged institutions to reflect on the level and intensity of engagement by the teachers and to address the changes that were necessary.

(Participant 12) *It forced all the team, erm... to reflect in which kind of education we offer and what were the changes we needed to do. ... we are more forced to reflect in three different ways as teachers in all the team. First the 'what is physiotherapy at the moment and what we needed to change in our curriculum to be at the European level.' The second was about the learning strategies. That was the big big reflection we needed to make in our institution, erm... so we changed the learning strategies as a team. We have been, erm... learning how to teach. That was a big... a big change and the other one was to have a curricular plan more flexible. And we needed to also, as a team to develop a flexible course.*



Opportunities were reported that stimulated a better professional recognition that also reflected positively on the university.

*(Participant 7) Yes. I'm convinced that it's a good thing; that it gives new opportunities; that our profession will be better recognised; that we actually form a profession which we haven't really had before but it takes time.*

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*(Participant 4) And then also the possibility to access to a second level degree; before 2000, this was not possible in C4 so this is also an important step for our profession, also for the university I think.*

The Bologna Process stimulated the implementation of proper quality assurance mechanisms.

*(Participant 12) C12 didn't have a good system on quality before. And that changed a lot with the Bologna Process. Ahh, both the educational ministry and the educational institutes, erm... we have been developing the right instruments according to the EQF.*

The Bologna Process provided the platform to widen the discussions for students, teachers and the profession on a national level and within a European perspective.

*(Participant 2) ... all the universities had to work together to make a proposal and to write a blueprint on the guidelines of this degree ... and for that we have to start studying not only what the teachers want, but also what the professionals want, what the students want, et cetera.*

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*(Participant 4) Well, this process is a good way to allow people, students, teachers and professionals to talk with one another and exchange ideas, comments and concrete activities in order to have a common background and that I think that was one of the important or best innovations of the Bologna Process. ... But the Bologna process, in my opinion, is very important. For the first time in many years, from the foundation of the European community, we have a framework to talk with one another on a common basis. This is my opinion.*

The Bologna Process fulfilled the change aspirations that were perceived as necessary for a long time.

*(Participant 2) For us this process of Bologna came with a lot of aspiration of changing, so in fact for physiotherapy in [my country] it was the same if it was called Bologna or New Law of Education. Physiotherapy in [my country] wanted a change and this was perfect. It came from Europe so it was not us, it's all physiotherapists who want to change, and it's from Europe; perfect we used that for ourselves, so in our case it goes together with the changes.*

### **7.3.18 Relation to the Profession**

The relation between the education and practice elements of the physiotherapy profession was also noted to be influenced by the Bologna Process. The different functions of the profession reflected in a certain way on the structure of the programmes of study; and also on the significance for mobility for the students and the graduates.

*(Participant 11) Coming to Bologna, I think one has to emphasise first of all that, ... one has to define physiotherapy, because it is not just a definition of what a physiotherapist is, but it's also what the philosophy of what physiotherapy is in that country. ... So, and each university has its own philosophy. ... See, what Bologna doesn't tell you is how many of these ECTS's ought to be in what subjects. It just tells you that a course ought to have 240 or 180 ECTS, but it doesn't tell you what they have to be.*

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*(Participant 12) Only the countries are doing it in a different way which is understandable. We have our own specificities, but I'm not sure that if this is going to create the easier mobility that we are looking for.*

*(Interviewer) And is it just mobility of students and teachers?*

*(Participant 12) And of the professionals as well!*

The Bologna Process served to reflect also on the entry level into the physiotherapy profession.

(Participant 3) *Yes, yes, the bachelor level is the entry-level to the profession.*

(Interviewer) *And what are your views on this?*

(Participant 3) *That was a very hard question. I think that it is ok, erm... you hear all the time that physios need so much knowledge and so much competences but I really think that the bachelor level is enough for being a good physio; then we need the masters and the PhDs to develop new knowledge to develop the working life and so on and so on, but I think it is enough with the basic degree to enter the profession.*

### 7.3.19 Students perspective

The student's perspectives were identified through the views of the participants who reported that they had observed students finding difficulty in understanding the systems and the administrative changes.

(Participant 1) *I know that some people don't like it at all. What is a bit difficult for the students is to understand that one ECTS means a lot of work and to translate the workload of one ECTS to the students, on one hand how much hours do we need to be at the university and how much work will this mean for me really, which I don't see in timetable from the university but just have to feel and make come true, and this is quite difficult sometimes.*

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(Participant 2) *I have to say that sometimes it takes less time for the students, all they want is to pass the exam, so for some students it is a lot better the old system, because they just study and do their exam and in the actual system they have to do a lot of works.*

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(Participant 9) *So we have to fit with the university based model base of education which is 'you cannot teach them everything' and therefore the staff have to get used to doing that. The responsibility is on the student to learn for themselves as well as to attend the classes. ... It takes them some time to settle in to what we expect them to do; which is why we have extra hours in the first year, which are less in the second and less in the third as they get more and more autonomous. But they still struggle with trying to know the level that they have to achieve and have to be, and work up, because we aren't telling them everything; and it does become difficult for some of them. ... But some of them do find it really really hard knowing what exactly they do need to know.*

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(Interviewer) *Do your students know about the Bologna Process?*

(Participant 10) *Very few I think; those who are engaged in the programme work, we have them, they are represented in all our different boards governing the education, the programme. On a local level and also on a central level they are represented; so those who are active in student unions, who are on the Boards of our different programmes, they know, but others I don't think so.*

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(Participant 12) *... they are not so impressed with the Bologna Process. ... Because of the reformulations made, they were again more administrative, erm... than in the quality of the strategy or content. And the main interpretation or misunderstanding of this Bologna Process was that the learning should be centred on the student and the teachers don't have to invest so much. And some changed all the curricular plans according to this philosophy, and that didn't work so well.*

Students were perceived to have cherished the opportunity to be better integrated in the university culture as this provided them with the opportunity to be better recognised as professionals.

(Participant 2) *... from the beginning the idea was 'ah, with the Bologna process, we are not going to be three year education, we are going to be four year, we are going to be like the others. You see, in physiotherapy the students were complaining so much that they didn't have enough time to become professionals. They were always complaining for the lack of education.*

Students gave positive feedback towards the new methods of learning that resulted as a consequence of the Bologna Process and which translated in their active participation.

(Participant 8) *... it is very positive and our students have also given very positive feedback. When we work more student-centred or problem-based they are very satisfied because they learn more and they are more actively involved in the study process.*

### 7.3.20 Teachers' attitude

The teachers' attitudes were also reportedly influenced by the Bologna Process. They were perceived to be influenced indirectly as they were not always aware that changes stemmed from the Bologna Process.

*(Participant 10) ... that of course comes from the Bologna Process; but I don't think people are aware of that and on the whole we have been working a lot with learning goals, learning outcomes, criteria and so everybody is well aware of that, all the teachers, but I don't think they know that it stems from the Bologna Process influencing the Ministry of Education which in its turn influences us.*

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*(Participant 9) I think they just come to accept it now as that's what we actually do and that's what we are trying to produce.*



## 7.4 Interpretation of the findings

The findings of the interviews have been reported through the different themes of the thematic framework that resulted by means of the framework analysis approach. By the end it became possible to map out and interpret these themes in a manner that served to bring out the emerging debates and key influences. These have come to light as a result of a continuous process of immersion and familiarisation with the data in a constructive way, and shall serve as the foundation for the discussion. Four key arguments of the Bologna Process have been identified to have had an influence on the organisational governance of physiotherapy in higher education across Europe: The degree structure and duration of programmes (including ECTS); Mobility; Quality and the discussions on Harmonisation and diversity. They have been identified in view of the number of themes with which they have had a direct reference. These are represented in figures 7.1 -7.4. As a consequence it was now possible to go back to the data and in light of these key arguments draw conclusions towards the main findings that served to substantiate these claims (see Table 7.4).

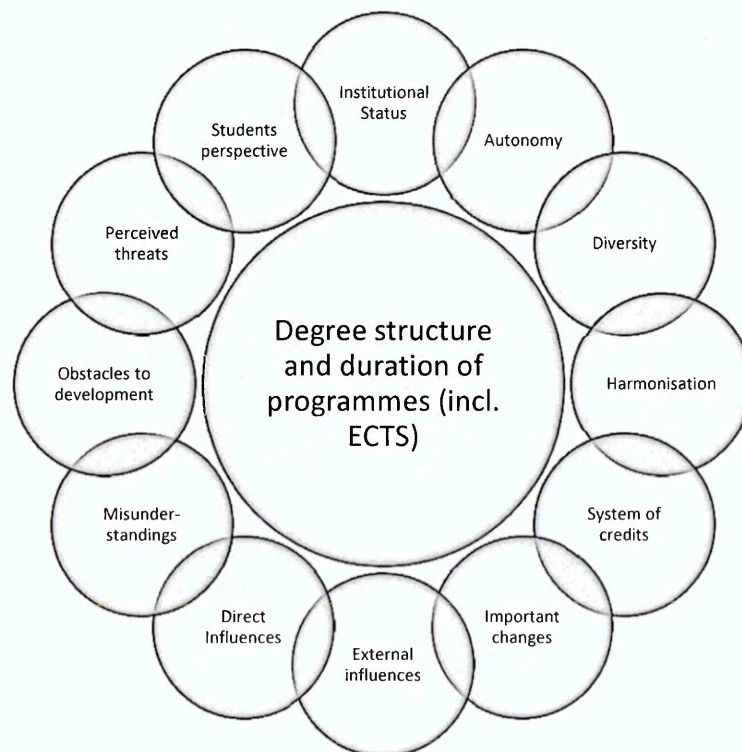


FIGURE 7.1: THEMES RELATED TO THE DEGREE STRUCTURE AND DURATION OF PROGRAMMES

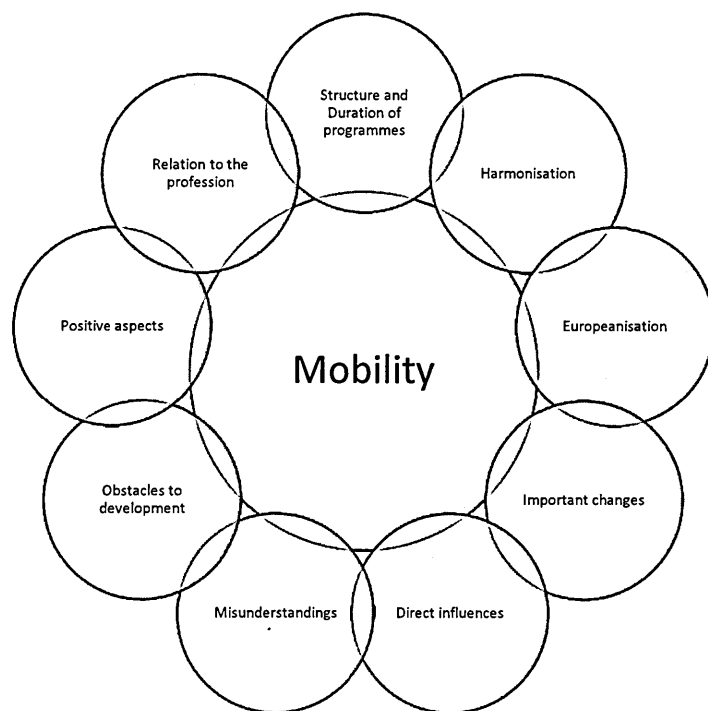


FIGURE 7.2: THEMES RELATED TO MOBILITY



FIGURE 7.3: THEMES RELATED TO QUALITY

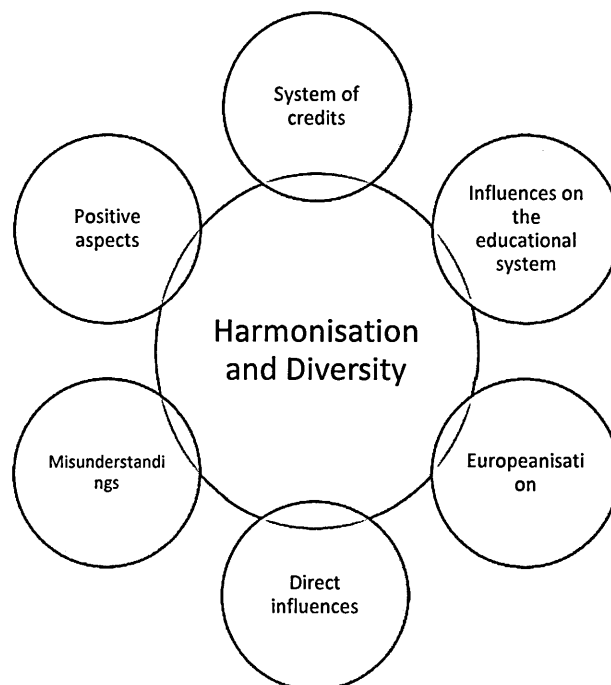


FIGURE 7.4: THEMES RELATED TO HARMONISATION AND DIVERSITY

TABLE 7.4: THE MAIN FINDINGS FROM THE INTERVIEW DATA THAT SERVED TO SUBSTANTIATE THE CLAIMS FOR THE THREE KEY AREAS OF STRUCTURE AND DURATION OF PROGRAMMES, MOBILITY AND QUALITY

Key Arguments	Main Findings
<b>Structure and duration of programmes (incl. ECTS)</b>	<p><i>There is no single model of a first and second-cycle degree programmes for physiotherapy.</i></p> <p><i>Physiotherapy education across Europe takes place at a higher education level with a few important exceptions, indicating that physiotherapy education across Europe is not all at the same level and until it is such, a complete European identity on physiotherapy education cannot be developed. The Bologna Process appears to have facilitated an exchange of ideas and discussions on activities that was not previously held and that has encouraged the comparison of local systems to the European one.</i></p> <p><i>From amongst the Heads of Departments, 89.9% reported that the Bachelor qualification from their institution granted entry into the profession.</i></p> <p><i>Physiotherapy programmes appear to be following the same trends as other academic programmes across Europe as in finding difficulty to make the qualifications framework work in practice.</i></p> <p><i>It transpires that the social dimensions for access to higher education across Europe are different. This creates further obstacles towards the convergence of programmes.</i></p> <p><i>Across Europe, the entry level into the physiotherapy profession, based on the underlying value of the ECTS, appears to be different in different countries and this has implications for the recognition of degrees and qualifications.</i></p>
<b>Mobility</b>	<p><i>Mobility rates for physiotherapy students are low as a result of institutions' fixed, and as a consequence inflexible, approaches to academic qualification. The obstacles to mobility are mostly administrative and dependent on the recognition by the home institution of the programme at the host institution.</i></p> <p><i>The different structure and duration of the study programmes served as a barrier to mobility especially when the study programmes did not match.</i></p>
<b>Quality</b>	<p><i>The general consensus was that confidence in the automatic recognition of degrees was lacking precisely because the converging systems were not considering all aspects of quality measures.</i></p> <p><i>Raising the entry level qualification to a Master level.</i></p> <p><i>It was generally held that a three year programme was too short, especially for a professional degree and this was expressed through the considerations that three years did not allow the scope to address both the academic and clinical components of the course.</i></p>

This chapter has reported on the interview findings exemplified through the thematic framework as outlined by the framework analysis approach. The emerging debates and key influences of the Bologna Process on physiotherapy education have been interpreted to be in four areas: the degree structure and duration of programmes; mobility; quality and the debate on harmonisation and diversity.

The next chapter of this thesis shall be the discussion.

# Chapter 8

## *The Discussion*

This chapter discusses the usefulness of case study methodology in addressing the research questions presented in the first part of the thesis. The main findings of the study are then discussed, firstly with respect to the first three objectives of the study; the latter part of the chapter addresses the fourth and final objective through reference to a number of social factors. These are: change; harmonisation & diversity; Europeanisation and egalitarianism. A further concept labelled 'unbeknown' arising from the study's data is also introduced into the discussion of the findings.

This chapter leads on to the final concluding chapter of this thesis.



The research interest of this study was to investigate and understand the influences of the Bologna Process on physiotherapy education across Europe. This was effected by examining both the extent of the adoption of the Bologna objectives and the resultant impact on educational governance within physiotherapy. The aim was to draw out the influence that the Bologna Process may have had on physiotherapy in higher education across Europe in order to address the research questions:

1. How has the Bologna Process influenced the governance of physiotherapy education across Europe?
2. What is the level of engagement with the Bologna objectives within physiotherapy in higher education?
3. How are the different European perspectives understood with respect to the adoption of the Bologna Process?

The objectives of the study were, therefore, to determine the extent of the engagement with the objectives of the Bologna Process within physiotherapy education programmes; to elicit the different perspectives held by leaders in physiotherapy education across Europe in the light of the objectives of the Bologna Process; to understand the nature of any influence of the Bologna Process and to describe the differences between different countries, and finally to understand any social factors that may have determined and shaped such influences.

By the end of this study the objectives had been met and themes related to change, harmonisation/diversity, Europeanisation, egalitarianism and a concept labelled as 'unbeknown' were used as perspectives through which to discuss the findings.

The limitations of the study are discussed at the levels of the methodology, methods and the findings. These are summarised in Table 8.1 and will be discussed throughout this first section of the chapter.

TABLE 8.1: SUMMARY OF THE LIMITATIONS OF THIS STUDY

Study Limitations	
Methodology Level	<p>Interpretative, lacking objective ontological reality</p> <p>Case study as a methodology was limited to the detailed examination of a single example (the influences) in this Type 1 Case Study Design</p>
Methods Level	<p>Population and sample sizes:</p> <p>Interviews limited to Enphe country coordinators</p> <p>Semi-structured individual interviews</p> <p>Lists of Heads of Departments was restricted to the independent compilation of a list of institutions across Europe by the researcher</p> <p>Total number of institutions is unknown</p> <p>Data Collection:</p> <p>Survey responses were all collected in English</p> <p>The web based survey method adopted could have been unsupported on the data processing devices used by the respondents</p> <p>Length of survey to the Heads of Departments may have been too time consuming</p>
Findings	Low response rates

## 8.1 Discussion of the Methodology

This section discusses the research methodology and the research methods. It offers a justification for the choices made but acknowledges difficulties encountered during the data collection. An advantage of following the case study approach was that it allowed for the intensive analysis of the Bologna Process stressing developmental factors in relation to physiotherapy education (Flyvbjerg 2011). Abercrombie, Hill and Turner (1984) have argued that the nature of a single case limits findings to a detailed examination of one phenomenon and as such cannot provide

reliable information beyond the boundaries of the case. However, given that there was no intention to generalise the findings in a statistical sense the advantages provided by case study methodology met the requirement to study the phenomenon in depth, ensuring the choice of this methodology was relevant and appropriate to this study.

Case study allows for different data collection methods to be employed and in this study the research methods chosen were the distribution of a survey questionnaire and the conduct of individual semi-structured interviews. These methods were chosen as it was necessary to determine the extent of the engagement with the Bologna objectives through a survey allowing mass data collection. The distribution of the survey questionnaires was to Heads of Departments of physiotherapy schools across Europe and to Enphe country coordinators. It was also necessary to elicit different European perspectives through interviews with key participants, from across Europe, who were able to provide information about the European dimension. According to Kvale (1996 p.1) *“if you want to know how people understand their world ... why not talk to them? ... The qualitative research interview attempts to understand the world from the subjects’ point of view, to unfold the meaning of peoples’ experiences, to uncover their lived world prior to scientific explanations.”*

The strategic decision to elicit context dependent qualitative data, led to the selection of the Enphe country coordinators as interview participants in this study. The interviews were carried out with the Enphe group following the distribution of the questionnaire. The Heads of Departments were not invited to participate in the interviews.

The choice of only selecting the Enphe country coordinators for the interviews of this study may be viewed as a limitation in terms of representation because Enphe only represents those institutions that are members within the network. This factor was considered from the outset and ultimately the decision was based on a number of observations: Enphe is a European network and as such is congruent with the objective of this study to elicit the different perspectives across Europe; there was, and still is, no other European-based organisation dedicated to the discussion on physiotherapy education at a national level. A further option was available but not taken up. This was the possibility of the members of the Education Matters Working

Group of the ER-WCPT. However, as this group functioned mainly as an observatory it was felt that an interview with these colleagues would not have met the objectives for this study.

It is important to acknowledge that membership in Enphe is limited to those working in designated institutions. The Enphe country coordinators' committee comprises one person from each country, who is elected by his/her peers. An assumption that they were therefore recognised and supported in their decisions by their academic colleagues from other institutions across the country they represent, may not hold true, and it could not be argued that the collective views in any one country were represented by the Enphe country coordinator.

The findings from the survey to the Heads of Departments demonstrate that 51.7% of the responding institutions (47/91) were members of Enphe. This represents 23.4% of the total survey population (47/201). A limitation was that it was not possible to collect data from Enphe on how many, or which institutions were not members, since they only hold a database on members. It is not known, therefore whether the non-responding institutions are member of Enphe or not, again limiting claims for a wide representation of institutions within any country.

To try and address this issue, it was also considered to invite participants to an interview from amongst the Heads of Departments. However, the response to the survey questionnaire was planned to be anonymous with the intention of increasing the response rate. This therefore meant that there was no possibility of identifying head of department respondents and inviting them to an interview. This was another limitation. However, since interviews require an appropriate human interaction and sense-of-ease on the part of both the researcher and the researched (Kvale 1996), the role of the researcher within Enphe made this possible and the decision was taken that interviews with the Enphe group presented a good opportunity to collect data that met the aims of the study, despite the acknowledged limitations.



### 8.1.1 The survey questionnaires

The response rates to questionnaires in academic studies is notoriously low averaging 55.6% ( $\pm 19.7$ ) and showing a decline throughout the years more notably in the groups involving top management and organisational representatives (Baruch 1999). This had to be considered in the design of the questionnaires.

Two separate survey questionnaires were prepared and distributed, one to the Heads of Physiotherapy Departments in schools across Europe and the other to the Enphe country coordinators. The purpose of sending two survey questionnaires was to gather information on an institutional level (the former) and on a national level (the latter). A number of limitations need to be acknowledged and discussed. These relate to the population and sample size, design options, implementation procedures and control over the data.

There is no official record of the number of schools of physiotherapy on a European level. In most countries, physiotherapy education is well regulated and information is easily available from the professional associations. However, physiotherapy may be regulated under different conditions, such as in Germany, where physiotherapy education is regulated differently in different federal states (*Landers*) (Scherfer 2011). Furthermore physiotherapy education may be offered at different levels, such as at higher education, a parallel system or secondary/professional level (ER-WCPT 2004). This issue was important to determine the number of schools that would be included in the study, and so, priority was given to identify those physiotherapy schools that operated within higher education since this reflected the spirit of the Bologna Process. To-date it is not possible to objectively describe how many institutions provide physiotherapy education throughout Europe as many schools that do not operate at a higher education level, such as in Germany, appear to be unregulated. As a consequence it is also not possible to determine precisely how many physiotherapists qualify each year or practise in Europe because in certain countries, like Poland, this information is not available as professional regulation is not mandatory (ER-WCPT 2008). In order to reduce this limitation, information pertaining to the schools of physiotherapy was sought through web-based searches of the websites of national physiotherapy associations and this was followed up by direct correspondence. A



database was created with a list that included the contact details of the schools, through which, in turn, it became possible to establish the name and contact details of the head of department. This was all carried out via email. It could have been done using conventional mail however considering time, expense and environmental considerations the decision to use email was felt to be more appropriate.

In terms of a distribution strategy the Tailored Design Method for questionnaires (Dillman, Smyth and Melani Christian 2009) was followed under the premise that obtaining responses from a large number of respondents, for example from one geographical area, should not have been a substitute for good coverage in terms of ensuring representation from across Europe (Dillman 2000). Hence, guided by this method, the choice to distribute and collect the questionnaires by conventional mail or via the internet was in turn guided by the impact this would have on the response rate. The success of survey questionnaires by modes other than mail appeared to depend on a number of factors including the topic itself, whether the survey was mandatory or voluntary and whether the survey was long or short.

The option for conventional mail survey was not taken in view of the availability of high-speed internet access as a preferred alternative. Mail surveys carry the limitation of high cost printing, packaging and postage. These costs would have had to be borne repeatedly with each reminder notice. Furthermore the process of manually inputting the data collected into a computer programme would have had to be carried out increasing the chances of data inputting errors. Surveys via the internet are more efficient in reducing costs and overriding international boundaries. It therefore became possible to survey the entire population rather than a sample. Since the targeted population was academics, it was assumed that they had access to high-speed internet. On the other hand a limitation rests on issues of security and confidentiality.

The decision on the method for the survey was also informed by the relatively low response rate (30.6%) to the mail survey questionnaire distributed to European physiotherapy schools in the study by Staes, Stappaerts and Myles (2001). These considerations justify the decision to adopt an internet based mode of survey questionnaire.

The next decision was to select the more appropriate data collection method between web-based survey (WBS) and e-mail survey. WBS are more refined and provided more survey capabilities including the storage of databases in accurate, organised, meaningful and accessible ways, without the chances of increasing data inputting error. The limitations and considerations that had to be regarded were design options, implementation procedures and control over the actual data. The design had to consider the length of the questionnaire that would impact upon the response time. The survey questionnaire to the Heads of Departments contained 50 questions and even though it was piloted for length and ease of response, with hindsight, it may have contributed to a lower response rate.

The WBS provided the best opportunity to collect data from a large number of respondents whilst hosting and organising the data collected into a meaningful way. Unlike the other modes of data collection it allowed all those identified to be reached. By investing in accredited software that was verified to be secure and trustworthy, the requirements of good governance in research were fulfilled. The WBS method also allowed for the participants to receive a soft-copy of the questionnaire that they could print out at their convenience. It also meant that the soft-copy could be forwarded to the participants in different languages. This facilitated the process for the participants who, even though requested to submit the response using the English version, could verify the contents of the questionnaire in a language with which they were more familiar.

These decisions, collectively, appear to have been appropriate as the response rates to the survey questionnaires were 82.1% for the Enphe country coordinators and 45.6% for the Heads of Departments of physiotherapy schools. The latter represents an increase by 15% in the response rate compared to the Staes et al. survey carried out in 2001.

Notwithstanding these measures, the response rate for the Heads of Departments may still appear too low for the findings to be interpreted with confidence. The optimal response rates vary in the literature. Finchman (2008) suggests that response rates at around 60% should be the research goal, with an 80% benchmark to be representative; and with higher expectations for surveys in recent years. This contrasts with the findings of Baruch (1999) who reported that the average response rate of top

managers to be  $36.1\% \pm 18.2$  and lower levels of response amongst the representatives of organisational groups; and with a trend for decreasing numbers over the years. These differing reports highlight the difference between what is considered to be optimal with the reality of events.

The rigorous approach adopted in the design of the study affirms that the overall findings are adequate when placed in the context of their development and are therefore viable (von Glasersfeld 1989) especially when considering that the general epistemological direction of this study was a constructionist one. This provides an argument that the findings following the data collection using the survey questionnaires provides a satisfactory indication of the extent of the engagement with the objectives of the Bologna Process.

### **8.1.2 The Interview**

Individual interviews were conducted with 12 Enphe country coordinators. The participants were interviewed by following a semi-structured approach and using an interview guide. A different form of interview may have been used such as group interviews; sometimes also regarded as focus group interviews (Kvale 1996). Such a choice of interview would have allowed for spontaneity and discussion amongst the participants; *“the interaction among the interview subjects often leads to spontaneous and emotional statements about the topic being discussed”* (Kvale p.101). This was considered and might have resulted in a more colourful discussion with a direct and immediate discussion and comparison of the influences of the Bologna Process amongst and across the different European countries. However, it could have also led to a chaotic data collection resulting in analytical difficulties. Furthermore, linking back to the objectives of this study, it was intended to understand the nature of any influence and to describe the differences between different countries. For this reason the individual interviews were preferred. The findings arising from the interviews have actively generated potential models of the experiences in the light of the objectives of the Bologna Process. Another limitation of the study could be identified as the individual interviews lacking a participant interactive element found in focus groups.

## 8.2 Discussion of the Findings

This discussion draws on both the survey findings and the interview findings. Twelve main findings may be drawn out that are listed in Table 8.2. The first of these findings shall be discussed separately as it serves to set out the context of the general understanding by the participants on the importance of the Bologna Process. The other findings will be discussed in the light of the emerging debates on the degree structure and duration of programmes (including ECTS); Mobility and Quality in a transversal direction to reflect the first three objectives of this study that were:

1. to determine the extent of the engagement with the objectives of the Bologna Process within physiotherapy education programmes;
2. to elicit the different perspectives held by leaders in physiotherapy education across Europe in the light of the objectives of the Bologna Process and
3. to understand the nature of any influence of the Bologna Process and to describe the differences between different countries.

A discussion on the emerging debate of harmonisation and diversity shall be discussed in the subsequent section of this chapter together with other themes to reflect the fourth objective of this study.



TABLE 8.2: THE TWELVE MAIN FINDINGS OF THIS STUDY INTO THE INFLUENCES OF THE BOLOGNA PROCESS ON PHYSIOTHERAPY IN HIGHER EDUCATION

Study Objectives			
	Extent of engagement	Different perspectives	Nature of influence
General Understanding	1. The Bologna Process was understood to be important for the organisation of the physiotherapy programmes in their country and departments respectively by 95.7% of the responding Enphe country coordinators and 83.9% of the responding Heads of Departments.		
	2. There is no single model of a first and second-cycle degree programmes for physiotherapy.	4. From amongst the Heads of Departments, 89.9% reported that the Bachelor qualification from their institution granted entry into the profession.	7. Physiotherapy education across Europe takes place at a higher education level with a few important exceptions, indicating that physiotherapy education across Europe is not all at the same level and until it is such, a complete European identity on physiotherapy education cannot be developed. The Bologna Process appears to have facilitated an exchange of ideas and discussions on activities that was not previously held and that has encouraged the comparison of local systems to the European one.
Structure and duration of programmes (incl. ECTS)		5. Across Europe, the entry level into the physiotherapy profession, based on the underlying value of the ECTS, appears to be different in different countries and this has implications for the recognition of degrees and qualifications.	8. Physiotherapy programmes appear to be following the same trends as other academic programmes across Europe as in finding difficulty to make the qualifications framework work in practice.
			9. It transpires that the social dimensions for access to higher education across Europe are different. This creates further obstacles towards the convergence of programmes.
Mobility	3. Mobility rates for physiotherapy students are low as a result of institutions' fixed, and as a consequence inflexible, approaches to academic qualification. The obstacles to mobility are mostly administrative and dependent on the recognition by the home institution of the programme at the host institution.		10. The different structure and duration of the study programmes served as a barrier to mobility especially when the study programmes did not match.
Quality		6. The general consensus was that confidence in the automatic recognition of degrees was lacking precisely because the converging systems were not considering all aspects of quality measures.	11. It was generally held that a three year programme was too short, especially for a professional degree and this was expressed through the considerations that three years did not allow the scope to address both the academic and clinical components of the course. 12. Raising the entry level qualification to a Master level.

The revised themes in the development of the Thematic Framework (TF) at the end of the Framework Analysis



### 8.2.1 The general understanding by the participants on the importance of the Bologna Process

- 1. The Bologna Process was understood to be important for the organisation of the physiotherapy programmes in their country and departments respectively by 95.7% of the responding Enphe country coordinators and 83.9% of the responding Heads of Departments.*

In order to set a context for reflection on the responses of the participants, it was necessary to elicit their understanding of the importance of the Bologna Process as it appeared to them. This was asked since it was only assumed that the participants were knowledgeable about the Bologna Process in view of the positions that they held. As a consequence the responses to the survey questionnaires were considered in view of the level of their awareness of the Bologna Process and any lack of awareness precluded the respondents from continuing with the survey. This effectively served to filter the responses. All the Enphe country coordinators and 96.6% of the Heads of Departments indicated they were aware of the Bologna Process. The associated finding that 3.4% of the Heads of Departments were therefore unaware of the Bologna Process echoed the discussions by Kwiek (2004) and Kettunen and Kantola (2006) who held that a lack of strategic awareness and ineffective communication amongst academics resulted in some still being unaware of the consequences of the Bologna ideas. It was also surmised by these authors that the different perspectives reflected at each level of policy enactment may have led to reforms in higher education that were not being conceptually linked to the Bologna Process. This possibility was supported by the findings of the present study. For the majority who were aware of the Bologna Process it was necessary to assess what they thought of its influence; for the Heads of Departments on how they engaged with it in the management of the course programmes that they headed, and for the Enphe country coordinators in view of how the Bologna Process was reflected in their country. All those who were aware of the Bologna Process also reported themselves to be knowledgeable of it. Eighty seven per cent of the Enphe group and 86.2% of the Heads of Departments stated that they were somewhat or very knowledgeable. This was important in view of subsequent questions in the surveys reflecting their perceived understanding of the influence of the Bologna Process on physiotherapy education.

From the survey respondents, 95.7% of the Enphe country coordinators and 83.9% of the Heads of Departments indicated that the Bologna Process was either important or very important for the organisation of the physiotherapy programmes in their country and departments. None of the Enphe country coordinators reported that this was not important in their country; however, 2.3% of the Heads of Departments responded that the Bologna Process was not important for their departments. A possible reason for this was reflected by some interviewees' who noted that on an organisational level nothing had changed since the inception of the Bologna Process, especially since the academic level and the course content had remained the same. Once again this could be explained by the different perspectives at different policy levels. The same conclusion follows with the findings from the survey to the Enphe country coordinators (60.9%) and Heads of Departments (58.6%) that the changes in physiotherapy education were influenced to a large extent by the Bologna Process. 4.3% of the Enphe country coordinators reported that change at a national level had not been influenced by the Bologna Process and 16.1% of the Heads of Departments reported no such influence at a departmental level. As a conclusion to these findings it may be surmised that the Bologna Process was understood to be important for the majority of the participants in this study. This is central because it addresses the participants' views on their awareness of the Bologna Process. It is fair to assume that the respondents were knowledgeable of the Bologna Process and that the majority of them were conscious of its importance. This therefore increased the viability for which the knowledge created through this study is adequate and therefore practicable (von Glasersfeld 1989). It was not possible to compare the data that has been presented to previous reports or studies as this study appears to be a first of its kind. As such it sets a standard against which to compare any future explorations into this matter.

## 8.2.2 Extent of engagement with the Bologna Objectives

*2. There is no single model of a Bachelor and Master degree programmes for physiotherapy.*

Staes, Stappaerts and Myles (2001) reported that some schools across Europe had favoured three-year programmes as opposed to four-year programmes and that the courses were designed by different agencies that reflected this choice of length of study. Those programmes lasting three years were administered by statutory bodies and/or the local health authorities; whilst those programmes that lasted four years appeared to be part of the curriculum design found within the universities. This present study has found that 98.9% (n = 89) of the respondents to the survey to the Heads of Departments operated within higher education in their respective national educational systems.

The reported findings in this study have shown that from the respondents 98.9% of physiotherapy departments run a Bachelor programme and 52.7% also run Master programmes. A Doctoral programme was also available in 20.9% of these departments. There is no single model of Bachelor and Master Programmes for physiotherapy and this is reflected also within the general picture for Bachelor and Master Programmes in all subjects across the EHEA (Dondelinger and Rauhvargers 2012). For the physiotherapy Bachelor degree the most dominant model is the three-year programme (56.8%) followed by the four-year programme (30.6%); but other lengths also exist, such as those lasting three and a half years (9.4%) and four and a half years (3.2%). For Master degrees, the most common model is the two-year programme (65.9%); but also at this level, variations are present. One-year programmes (21.3%) and one and a half year programmes (12.8%) have been reported. It would seem that the '3 + 2' model (three year Bachelor followed by two year Master) is the most common model but a number of other combinations also exist. This is possible under the Framework for Qualifications of the EHEA for the completion of a Bachelor and/or Bachelor-Master programme (Berg 2005). It emerged from the findings of the interviews that this had certain important implications towards the education of physiotherapists, particularly on the issue of quality. This will be discussed separately. Before that however, it is necessary to reflect on these

different models and to understand that it is possible to achieve a same level qualification but in different time frames.

The models reflect the programmes' duration either in years or in credits (ECTS); the target set by the European framework for a year of full-time studies being 60 ECTS. The guidelines for the association of credits with qualifications within the national frameworks have provided the typical ranges of ECTS for the completion of each independent cycle i.e. Bachelor and Master (see table 8.3) but have excluded any suggestion of a total value for the completion of a Master degree. By setting the minimum typical value to complete the Master level upon attainment of 60 ECTS it was not specified that this should effectively sum up to 300 ECTS for a combined Bachelor and Master degree. As a consequence it would appear that nine different combinations or models exist for the completion of a Bachelor-Master level degree. Effectively there is the possibility for a difference of as much as two years to complete a Master degree between the '3+1' model and the '4+2' model (table 8.4).

TABLE 8.3: ECTS CREDITS RANGES ESTABLISHED FOLLOWING THE REPORT ON THE FRAMEWORK FOR QUALIFICATIONS OF THE EHEA IN 2005

	Undergraduate			Graduate		
	First, 1st cycle			Second, 2nd cycle		Third, 3rd cycle
	(Short)	Bachelor		Master		Doctoral
<b>ECTS value:</b>	(120)	180 - 240		(60)	90 - 120	--
<b>Duration in years:</b>	2	3    4		(1)	1.5   2	--



TABLE 8.4: NINE DIFFERENT COMBINATIONS FOR THE COMPLETION OF A MASTER DEGREE

	1st + 2nd Cycle /years	Total / years	Total / ECTS
1	3 + 1	4	240
2	3 + 1.5	4.5	270
3	3 + 2	5	300
4	3.5 + 1	4.5	270
5	3.5 + 1.5	5	300
6	3.5 + 2	5.5	330
7	4 + 1	5	300
8	4 + 1.5	5.5	330
9	4 + 2	6	360

3. *Mobility rates for physiotherapy students are low as a result of institutions' fixed, and as a consequence inflexible, approaches to academic qualification. The obstacles to mobility are mostly administrative and dependent on the recognition by the home institution of the programme at the host institution.*

The issue of mobility, defined in this context as being a period of study or training abroad, was found to be reflected strongly in the reactions to the Bologna Process. This has always been at the heart of the Bologna agenda and specifically occupies the fourth objective (Bologna Declaration 1999). Mobility embraces political, social, economic, academic and cultural dimensions (Berlin communiqué 2003) and involves both student and staff mobility. The target for mobility across the EHEA has been set at 20% of those students graduating in Europe in 2020. The implementation of the other Bologna objectives, especially those related to '*the adoption of readable and comparable degrees*' (objective 1), '*systems based on cycles*' (objective 2) and '*systems based on credits*' (objective 3) has greatly influenced mobility and 82% of the respondents to the survey to the Heads of Departments reported having agreements in place for student and/or staff mobility in 2010. However in reality the success rate



of mobility is still far from the 20% target, with 50% of physiotherapy programmes reporting less than 5% student mobility. A number of situations were reported to have negatively influenced mobility. For instance, the credit system appeared to be appreciated by the interviewees for encouraging transparency, and as a consequence made it easier to compare the number of credits for a particular study-unit. However if the number of credits was not the same in both the home and the host institutions, then the students were faced with either the situation of attaining too many credits that were not transferable or too few credits that were not enough to fulfil the required benchmark set in the home institution.

It is thus not surprising that the mobility rates for physiotherapy students are low. These data suggest that for mobility to become more successful institutions must not remain so fixed and hence inflexible in their approach towards academic qualification that involves credit accumulation. Ultimately it would appear that the obstacles to mobility for physiotherapy students are mostly administrative and dependent on the recognition by the home institution of the programme at the host institution including also the education status in that country, the language of instruction, the course structure and also the level of post-qualification professional practice. The survey findings indicate that exchanges were more strongly considered by the majority of the Heads of Departments when similarities between the two programmes prevailed. These issues require further consideration, especially considering that following qualification, physiotherapists are the fourth most migrating (hence mobile) profession in Europe<sup>19</sup>.

### 8.2.3 Different perspectives

*4. From amongst the Heads of Departments, 89.9% reported that the Bachelor qualification from their institution granted entry into the profession.*

The Bologna Process promotes the Bachelor level to be appropriate for entry into the labour market and 89.8% of the Heads of Departments reported that their Bachelor programmes were geared to this. Entry at a later stage was reported to either follow a period of internship (4.5%) or at a higher level than Bachelor (4.5%). In consideration

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<sup>19</sup> [http://ec.europa.eu/internal\\_market/qualifications/regprof/index.cfm?fuseaction=stats.ranking&services=false](http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm?fuseaction=stats.ranking&services=false)

of the structure and duration of the programmes it appears that entry level into the physiotherapy profession across Europe varies. The majority of physiotherapists enter the profession following three years of full time studies whilst others enter after four years of full time studies. The discourse on competences and the attainment of minimum competences to fulfil the requirements to practise physiotherapy may be seen as an attempt to circumvent these differences in durations (Ven and Vyt 2007) and yet the findings of this study have shown that the differences are being perceived not to be so clear. The considerations for the acquisition of competences, particularly those involving knowledge and skill, were reflected upon by the participants to be dependent also on time, with a minimum time necessary to develop these competences.

*5. Across Europe, the entry level into the physiotherapy profession, based on the underlying value of the ECTS, appears to be different in different countries and this has implications for the recognition of degrees and qualifications.*

It would appear from the findings of the survey, that up to 2011 in Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Iceland, Italy, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and Turkey the ECTS has been implemented on a national level. In the United Kingdom (UK) and Lebanon the ECTS was implemented at an institutional level and in Latvia the ECTS appears not to have been adopted, at least up to 2011, for physiotherapy programmes. The ECTS was reported by 84.5% of the Heads of Departments to have been implemented in their departments.

The implementation of the ECTS is important as it quantifies the students' effort and permits the calculation of the number of credits that were accumulated, in an input system, by the student; and how many hours of learning would have been recognised in the accumulation of those credits. The ECTS allows for the comparison of the time recognised in studying a particular topic within the programme. Within the EHEA framework for ECTS, the recognised contribution for one credit may vary between 25 and 30 hours. So, if 10 credits in the ECTS were awarded for the completion of a particular study unit, and if the recognised contribution towards one such credit in that institution was 25 hours, then the time that was understood to be dedicated towards

the completion of that study unit is 250 hours. This would constitute a sixth of that year's programme of study (10 from 60 ECTS per year). This would then permit another institution to compare their programmes within the same area of study. This has appeared to be particularly relevant when students participate in exchange programmes with universities seeking reassurances that the time dedicated to a study unit is not less than that at home. Furthermore it was felt that the ECTS made recognition more equitable.

In reality, however, the findings from this study indicated that an input system such as the ECTS may not necessarily be perceived to lead to the attainment of the desired competences as the hours recognised to obtaining the credits was not always held to be conducive to adequate learning. This raised an argument during the interviews on what was the ideal time to acquire any given competence. The respondents in this study had different views on this. On one hand it was understood that if more time was dedicated to learning, then it would favour the acquisition of physiotherapy specific skills, as well as general competences such as clinical reasoning. Participants considered that anecdotal feedback from students seemed to convince course leaders that short clinical placements were met with dissatisfaction and a lesser confidence. On the other hand learning was viewed as something very personal and dependent on the student's ability and hence any quantification of hours was not considered important or central to learning.

Physiotherapy being a profession-based qualification involves both academic and practical components. Various learning activities were reported to be recognised in the calculation of student workload. These points need to be considered and discussed on two levels: recognition and student workload. For recognition purposes, it was felt that issues of poor comparability resulted whenever the value of one credit was given a different value in hours. This could be explained by considering the maximum difference in recognised hours for each credit, which is five hours (25 – 30 hours). This is a difference of 20% and with 60 ECTS allocated for each year of study it could be reflected with as many as 300 hours in difference – this could be argued as being important. The number of additional learning activities computed in the calculation of student workload also appears to be different in the award of one ECTS. Furthermore this was reported to also vary between academic and practical components. For the academic components of physiotherapy it appeared that the



attendance to lectures, seminars, tutorials and workshops, independent and private study, preparation of projects and examinations are all included in the calculation of student workload; for the clinical components the inclusion of independent and private study varies. The participants in this study were aware of these differences and reflected upon them when comparing their programmes to those in other countries. The Bologna Process did not provide the solution to this as it appeared to exclude the attainment of competences within its objectives and was limited to time and credits.

Although the ECTS allows for comparison and comparability of degrees, there are still a number of issues with which physiotherapy programmes have not as yet converged. On a European level it appears to have created some confusion, as while the ECTS was designed as a tool to facilitate transparency, in fact, the system appears not as transparent as intended. The central efforts are placed on the number of credits and not their content value.

Another issue that was highlighted regarded the students' understanding and comprehension of the ECTS and the efforts that were required by them to attain the competences and learning outcomes. The participants reported that the students found it difficult to translate the workload of the ECTS especially when it involved personal study time. This actually had a consequence for educators noting that they also needed to focus on the total workload for students when preparing knowledge transfer within the context of contact hours.

The findings of this study reflect those of the 2012 Bologna Process Implementation Report and also suggest that across Europe the systems are still varied with most countries allocating credits to students on the basis of a combination of workload and learning outcomes. The measure of hours of student work per credit also varies, as discussed earlier. For 31% of physiotherapy programmes surveyed in the present study, 25 hours for each credit are recognised; whilst 27 hours are recognised in 19% and 30 hours in a further 19%. The main conclusion on the allocation of the ECTS is that although it has been implemented, making sense of the system to allow comparisons in the context of value and content of learning remains challenging.

The allocation of credits is closely linked to the degree structure that was discussed previously. Effectively this means that if a physiotherapy programme is conducted over three years rather than four, then the total number of credits attained would be 180 rather than 240. Multiplying the credits by the different values in hours for each ECTS reveals a contrasting difference (table 8.5). A 3 year programme recognising 30 hours per ECTS (the maximum) would account for 600 hours less than those recognised for a 4 year programme with the minimum of 25 hours per ECTS. The greatest difference could be of 2700 hours of recognised workload / training between a graduate from a three-year programme and a graduate from a four-year programme. For physiotherapy, the considerations made by the participants were that in the context of learning time and student outcomes the differences in the shorter degrees were reflected in decreased time in clinical practice, knowledge gaps and poorer student attitudes. Currently, across Europe, the entry level into the physiotherapy profession and therefore the workforce, based on the underlying value of the ECTS, appears to be different in different countries and this has implications for the recognition of degrees and qualifications.

TABLE 8.5: COMPARISON OF THE TOTAL NUMBER OF RECOGNISED WORKLOAD HOURS BETWEEN A 3 YEAR AND 4 YEAR BACHELOR PROGRAMME IN VIEW OF THE VARIOUS ALLOCATIONS OF HOURS PER 1 ECTS

	<b>Total recognised hours</b>	
<b>Value attributed to 1 ECTS</b>	<b>3yr / 180 ECTS programme</b>	<b>4yr / 240 ECTS programme</b>
25	4500	6000
26	4680	6240
27	4860	6480
28	5040	6720
29	5220	6960
30	5400	7200



6. *The general consensus was that confidence in the automatic recognition of degrees was lacking precisely because the converging systems were not considering all aspects of quality measures.*

From the beginning of the Bologna Process there has always been a strong focus on quality issues effectively occupying the fifth objective of the Bologna Declaration (*Bologna Declaration 1999*). Less than half of the respondents from the Heads of Departments (44.4%) reported that their programmes follow the European Standards and Guidelines (ESG) for quality assurance. A further 23.3% have reported that they do not follow the ESG, despite it having been adopted by the EHEA in 2005. This correlates with the 2012 Bologna Process Implementation Report that has shown that the different national systems have remained quite diverse in their orientation towards quality assurance issues. Maintaining this diversity is agreeable if interested parties accept that *'the systems may become complex in attempting to respond to the variety of societal demands'* (Dondelinger and Rauhvargers 2012 p.72) amongst which trust that the institutions are providing quality education – both in terms of the content of their programmes (input) and the levels of the degrees and qualifications (output). The value of quality has been perceived as a requirement for society to believe that a physiotherapist is competent; having been assessed by peers and satisfactorily certified to be capable to do so. The findings of this study have shown that the participants linked quality to competence and this competence was closely associated to cultural factors. Since different cultures have different approaches to health care, it raises the issues for different countries assessing competence based on different cultural criteria. Hence it was not surprising that despite the presumption of trust in other systems, such systems of recognition like quality assurance practices may fail. So, for example, it was found in the interviews that participants perceived that the quality of a physiotherapist (output) was linked to what society expected from the physiotherapist. Quality was also linked to standards of practice. It was suggested by the participants that quality assurance mechanisms had to be located at a national level rather than a European level as it was felt that different countries had different standards and that there was not enough knowledge of the reciprocal standards to have clarity on this matter. Wasner (2006) had pointed out that physiotherapy institutions failed to sufficiently consider the European professional standards on quality assurance with the result that there was no European professional job

description and therefore no European educational goals. Consequently, in order to fulfil the demands of society for efficient and effective physiotherapeutic work in the respective health systems, and to compare these across Europe, she suggested that new methods to control the output-quality needed to be developed and implemented. There is resonance between the findings of this study and Wasner's recommendations that both the output and the input must be considered for systems to fully trust and recognise each other.

#### **8.2.4 Nature of the influences**

*7. Physiotherapy education across Europe takes place at a higher education level with a few important exceptions, indicating that physiotherapy education across Europe is not all at the same level and until it is such, a complete European identity on physiotherapy education cannot be developed. The Bologna Process appears to have facilitated an exchange of ideas and discussions on activities that was not previously held and that has encouraged the comparison of local systems to the European one.*

The Enphe country coordinators survey revealed that the education of physiotherapists across Europe takes place at a higher education level with a few exceptions. For example, in Germany the education level is still officially recognised at a professional/vocational level that is considered lower than higher education; whilst in Estonia physiotherapy education takes place at both the levels of professional/vocational and higher education. However, analysis of the responses by the Heads of Departments revealed that in Germany there were also reports that some physiotherapy programmes operated within the higher education sector. This was confirmed by Scherfer (2011) who indicated that Germany had two systems. The legal requirement is still that there is only one way to become a physiotherapist in Germany - and this is via training at a diploma level. In 2010 an amendment to the Federal Laws of Germany was introduced that permitted the federal states, in prototype cases, to permit the education of physiotherapists within universities and therefore in the tertiary sector of the German education system. These prototype programmes will be delivered until 2017 with an evaluation period starting in 2015 to assess their appropriateness for the German system of health related education. However, it is

clearly stated, that this is an exception to the rule, and regulation still holds that the qualification and entrance into the labour market as a physiotherapist requires training at a diploma level.

Other countries also appear to have different systems within their higher education such as Belgium, Denmark and the Netherlands where a binary higher education systems exists (Dondelinger and Rauhvargers 2012). In the Netherlands, for example, physiotherapy education takes place within the '*HBO*' system (higher professional education) and not at the university, which is reserved for only academic degrees. This has created two different Bachelor degrees and two different Master degrees (Bachelor/Master of Science versus Professional Bachelor/Master) (Kiers 2012).

These differences are also reflected in the progression between the first and second cycles. Across the EHEA, access to a Master programme is not always automatic following attainment of a Bachelor degree and students may be required to sit additional examinations or have mandatory work experience (Dondelinger and Rauhvargers 2012). The implications for access to the second cycle are greater when the entry-level into the profession is at a level higher than Bachelor level. Across Europe, however, there are no countries that oblige a physiotherapist to have a Master level education in order to practise. Belgian reports indicate that entry level is at Master level yet in reality this is not a legal requirement. Belgium is a unique situation where the education system in the French-speaking part differs from that in the Flemish-speaking part (Craps 2012). What happens in Belgium is that in the Flemish-speaking part, at present, physiotherapy programmes only offer a Bachelor + Master programme without the possibility of exiting at Bachelor level.

Over half (52.4%) of the responding Heads of Departments reported that access into a Master degree in physiotherapy is not automatic, effectively implying that for over half the programmes at Master level there is some form of barrier. These barriers were reported to range from the requirement of a number of years of practice (22.9%) to passing a test/examination/interview (17.1%) and undergraduate classification results (5.7%).

In the Netherlands the learning outcomes of the professional Bachelor degree may not be suitable for entry into a Master programme and as such access to an academic (unlike professional) master degree (which is the only route to a PhD) is only possible



following a one-year pre-Master course. Effectively this adds an extra year of study for physiotherapists wishing to take their education up to a third (Doctoral) level (Kiers 2012).

The pertinence of these findings is that physiotherapy education across Europe is not all at the same level and until it is, a complete European physiotherapy education profile cannot be developed. It could be suggested therefore, that the levels of education need to be the same so that commensurate comparisons can be made. The interview findings suggest that the Bologna Process appears to have achieved an exchange of ideas and also a discussion on particular activities that were not previously held; and that this has served to compare local systems to the different European systems.

*8. Physiotherapy programmes appear to be following the same trends as other academic programmes across Europe as in finding difficulty to make the qualifications framework work in practice.*

The Qualifications Framework (QF) is a Bologna tool developed with the intention to promote transparency describing and clearly expressing the differences between qualifications in all cycles and levels of education. It aims to foster mutual recognition by providing common reference points for level qualifications, for example Bachelor level, and also strengthening the ties between the qualifications and the learning outcomes. All countries signed up to the Bologna Declaration have been encouraged to develop their National Qualifications Framework (NQF) and to have this referenced against the European Qualifications Framework (EQF). It appears from the survey findings that up to 2011 the NQF has been implemented for all physiotherapy programmes in Denmark, Estonia, Germany, Iceland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. In the Czech Republic, Finland, Lebanon and Portugal the NQF has not been implemented in all the teaching institutions. In Austria a NQF does not exist for physiotherapy programmes. Instead Austrian institutes have adopted the European Qualification Framework (EQF). Across Europe 55.1% of physiotherapy programmes adhere to a qualifications framework that is linked to the EQF whilst 15.7% would appear to adhere to a different qualifications framework. A notable 29.2% (n= 26) of



the respondents did not know to which qualifications framework their institution adhered.

The 2012 Bologna Process Implementation Report underlined that the fulfilment of the steps required for national qualifications frameworks to be established is currently a main focus of the Bologna Process and that it required considerable effort from countries and involved the redesigning of study programmes. Furthermore, making the qualifications framework work in practice is being regarded as one of the major challenges of the EHEA in the future. The findings of this study suggest that physiotherapy programmes appear to be following the same trends as other academic programmes.

*9. It transpires that the social dimensions for access to higher education across Europe are different. This creates further obstacles towards the convergence of programmes.*

In the preparation of this study, aspects of the social dimensions in higher education as highlighted in the Bologna *communiqués* were examined, namely the number of years of formal obligatory education required to access higher education, the tuition fees for a 1<sup>st</sup> cycle Bachelor programme in physiotherapy studies, admission restrictions onto a 1<sup>st</sup> cycle Bachelor programme in physiotherapy studies and the possibility of flexible learning pathways. These four areas were considered as they directly touched onto issues of access and accessibility. This study has served to provide a current picture on how these play out in the context of physiotherapy. The motivations for the differences were not explored and nor was it the intention to do so. Important differences are noted across Europe showing that in some countries students appear to be advantaged over their European counterparts. These differences are mainly in the access onto a degree programme and the costs of tuition. Access onto a programme requiring a minimum of 12 years of combined primary and secondary level education was reported by 43.8% of the Heads of Departments. Instances of less than 12 years to more than 15 years were reported by the rest. These differences were noted also for programmes within the same country indicating that the access onto a Bachelor degree physiotherapy programme differed for students within the same country. In one particular case it was reported that access onto a programme required

an extra year of study on a special entry programme. However, this was compensated for at a later stage because the Bachelor programme was held over three years rather than four.

The study fees were also reported as being varied. For the majority of programmes tuition fees ranged from under 1000 Euros (20.9%) to between 1000 and 5000 Euros (24.4%) to complete a Bachelor programme. For 37.2% education was free at the point of delivery and in a very few institutions (4.7%) the students are actually paid a stipend. As a result of these findings it is apparent that there are considerable differences in fee tariffs across Europe.

It transpired from the findings of this study that the social dimensions for access to higher education across Europe are different. This indicates further obstacles towards the convergence of programmes. Whilst students could benefit from European policies on migration and attempt to pursue their studies in other countries where conditions would appear to be more favourable, this however does not happen and the reasons given for it would be at best speculative. It is not surprising that European institutes themselves and national reports have expressed significant shortcomings in these areas.

*10. The different structure and duration of the study programmes served as a barrier to mobility especially when the study programmes did not match.*

Funding opportunities through European based programmes such as ERASMUS are integral for mobility but dependent on certain criteria such as minimum durations for study periods. Whilst the funding opportunities may be seen to facilitate mobility, it was reported by the participants that the different structure and duration of the study programmes served as a barrier. In addition, as discussed previously, even when the structure of the programmes was comparable, different competences based on cultural factors also restricted mobility as students would be required to gain those 'home based' competences that were not a feature of programmes accessed during the mobility period. This seemed particularly challenging for the shorter programmes, as the restrictions of time did not permit students to undertake any extra work to retrieve these competencies.

It was recognised by the participants that students derived many benefits from a period of mobility during their studies that were described as a gain in personal achievement, professional development and enhancement of life experiences. However, whilst there appeared to be agreement that such periods of study in foreign universities was a positive experience for the student, in reality the circumstances that would serve to facilitate such opportunities were still perceived to be limited by transparency and recognition issues including the structure and duration of courses. Ultimately locally bound academic achievements and practice competencies were valued more than the cultural, social and economic benefits of mobility.

11. *It was generally held that a three year programme was too short, especially for a professional degree and this was expressed through the considerations that three years did not allow the scope to address both the academic and clinical components of the course.*

The findings of this study have highlighted how in some countries, before the introduction of the Bologna Process, physiotherapy programmes differed in their structure and content with the concern that even the exchange of students within the same country was challenging. With the introduction of the Bologna Process, physiotherapy programmes had to become organised into the established Bachelor and Bachelor-Master models with many reporting that they had to follow the general directions of their institution or their country. Because of this, most physiotherapy programmes adopted the three-year model for a Bachelor degree. However this was not necessarily met with universal optimism by course leaders as for some it meant that they were required to squeeze the contents of a four year programme into one that lasted three years. Even if they felt that three years was not conducive to attaining the minimum requirements they were nonetheless obliged to do so by the legislation. The implications on the structure and duration of physiotherapy degrees as a consequence of the Bologna Process by the participants in this study are summarised in figure 8.5.





accepted that knowledge gaps exist. Participants in the interviews who operated within a four year Bachelor degree programme reported that they saw no perceived value in shortening the courses to three years; and yet if it became obligatory to do so, they also understood that it would have to be so at the detriment of the quality of education.

The restructuring of courses into shorter programmes did however also appear to provide some leaders with an opportunity for developing their programmes, in an opportunistic way. This was described by some as being effective by giving responsibility for learning to the students and adopting more student-centered approaches to learning. This was perceived as conducive to students becoming more autonomous learners.

The justification for the choice of course duration was reported to be also the result of stringent legal systems in some countries that adopted a one-size-fits-all position. It was also suggested that financial issues had taken a central stage in the decisions to shorten the courses. Some systems have adapted to these situations by changing the entry requirements for the course. This has resulted in a structural arrangement where the first year of an otherwise four-year degree course is carried out prior to the main course within a specific programme that addresses general knowledge aspects on health care studies. Physiotherapy specific study units are addressed throughout the subsequent three year programme. In reality it means that the exit level following the three year programme is similar to the exit level of the four year course. This is also reflected in terms of the age of the student.

As reported, some programmes still follow a four-year undergraduate degree with a few Heads of Departments reporting to have switched from a three-year course to a four-year course. The decision for this change was justified insofar as it raised the profile of the physiotherapy profession in that particular country and hence bridged with the more prominent professions that had achieved a higher social status or university level in the past. As such the Bologna Process presented an opportunity to match the education level of physiotherapists with that of more traditional professions. In these cases the desire to equate the professions' status at home was considered ahead of the international developments (where the majority of courses

being delivered were now taking place over a period of three years) and this in itself presented as somewhat contradictory.

#### *12. Raising the entry level qualification to a Master level.*

It may be surmised that whilst the ECTS is a student-centred system it presented a number of issues for recognition. If the system was intended to generate greater transparency and trust among higher education systems there would appear to be no doubt that the level of transparency has increased. However, trust in any system being equal to another that operates within the same context, but under different conditions, has appeared lacking and was not perceived as being conducive towards gaining recognition. The underlying reflection remained to ascertain the minimum competence, ability, skill and/or knowledge required to become a physiotherapist. On an international level, the dialogue at conferences and seminars has been evolving on whether or not to take entry level into the profession up to a Master level as this would serve to iron out such differences. However the EHEA direction of a first cycle degree being the appropriate level of qualification for entry to the labour market is clear.

Along with the ECTS, the other Bologna tools such as the Qualifications Framework (QF) and the Diploma Supplement (DS) were also designed with intent to increase transparency and to foster the mutual recognition of the qualifications and degrees issued across European countries. The findings of this study show that the respondents reported that the ECTS (84.5%), the National QF (55.1%) and the DS (79.6%) were established. However the discrepancy in their application (also in view of the various structures of courses) across Europe seems to have created more questions on the mutual recognition of degrees. This was also perceived by the participants in the context that a one-size-fits-all model – that is the Bologna Process – may not necessarily meet the criteria for all higher education. Professional degrees like physiotherapy would require a much broader understanding and acceptance of the different approaches for trust in each other's systems to prevail. The general consensus was that confidence in giving value to a three year bachelor degree programme was low because the whole process did not envisage the complexities of becoming a physiotherapist, and that this was happening at the expense of

professional development. This seems to be a point of departure for the proponents of raising the professional entry level qualification to a Master level. This perspective coupled with the EHEA direction for a first cycle degree to be appropriate for entry to the labour market requires further attention. At a European level, the physiotherapy profession must consider whether or not abandoning the direction of the EHEA to have a Bachelor programme that is suitable for employment or raising the professional qualification to a Master level meets the scope of the profession and demands of society.

Time and time again proposals to raise the entry level into physiotherapy professional practice to a Master or Doctoral level have been put forward. Whilst it would appear that this may effectively iron out some differences - even though it has been shown that the duration for such qualifications would vary just the same - the findings of this study have also revealed concerns that such higher qualifications could affect the employability of graduates. The issues of employability are linked to the first cycle of studies being relevant to the European labour market as an appropriate level of qualification and therefore as a consequence also the effective attainment and completion of degrees. This study has not investigated the rates of attainment and completion of physiotherapy studies across Europe or in any single country. This study has sought to gain information on the preparation of physiotherapy students for the working world in terms of hours spent in clinical practice, guidance provided towards employment and finally, information pertaining to where students find employment. It was felt that these three elements were conducive towards finding employment or better employment. The changes in the general state of national and European economies and the labour markets would determine job opportunities (Dondelinger and Rauhvargers 2012) and hence it is felt that evaluation of these opportunities fell outside the scope of this study. However, possessing a higher education qualification appears to be of significant benefit as 86% of all tertiary graduates between 25 and 39 years were reported to be in employment in 2010 (EACEA/Eurydice 2012). The findings of this study have shown that physiotherapists find employment either within the public service (54.3%) or in private practices (40.7%).

Considerations for raising the bar to Master level must reflect upon the issues pertaining to qualification mismatching. Physiotherapists not only need to find a well-paying job but a meaningful one, which is one that matches their acquired knowledge



and skills. Vertical mismatching happens when a discrepancy results between the acquired and required level of education (Cedefop 2010). The consequences and implications of vertical mismatching need to be considered for physiotherapy education especially in the light of arguments to push entry level into the profession up to Master level. On one hand, in a number of countries, the Bologna Process has served to raise the professional profile resulting in the attainment of the same professional status with other professions. Appropriate remuneration that is not balanced with the status was cited as one of the greatest disappointments. In vertical mismatching, an individual is either over- or under-qualified for a job. Over-qualification is only a formality as *it is* possible for an over-qualified individual to have the competences to match the job required. In other words, a Master graduate could perform the duties of a Bachelor graduate but not vice-versa. Vertical mismatching however could have a strong negative influence on job satisfaction and furthermore the money to pay for a Master degree physiotherapist was reported to be a concern. The findings from the interviews have underlined that in certain countries it is perceived that the healthcare sector is reluctant to have Master level physiotherapists as their salaries would be too expensive. As a direct consequence this was understood to potentially result in fewer persons being interested in pursuing a degree in physiotherapy.

The considerations for raising the entry level into the profession must not only reflect the level rating of the profession, in so far as bringing the recognition of the physiotherapist at par with other healthcare related professions, but also the personal satisfactions in carrying out the job required.

In conclusion to this section of the discussion, the findings of this study have addressed the objectives set out in this research and have provided a great amount of data that was collected and analysed rigorously and discussed. They are important as they may serve as a reflection for physiotherapy course leaders in the development of physiotherapy curricula that involves the valuation of both local and European developments and also the expectations at the academic and political levels (Sacco 2008).



## 8.3 Discussion of Social Implications

This final part of the discussion reflects back to the fourth and final study objective related to understanding any social factors that may have determined and shaped any influences of the Bologna Process on physiotherapy in higher education. The discussion is organised around the themes of: Change; Harmonisation and Diversity; Europeanisation; Egalitarianism and a concept arising from the data labelled 'Unbeknown'.

### 8.3.1 Change

Change is a phenomenon that is affirmed by many change theories (Kritsonis 2004) and that is reflected across different elements such as organisations or behaviour. Within the context of this study change was studied as a consequence of the Bologna Process on organisational governance. For the purposes of this discussion, change was understood to be a resultant difference, as opposed to the process through which they have become different i.e. transition. So, in this sense, this discussion will focus on the motivations and drivers for change rather than the process of change. The participants conceived that the Bologna Process served as a vehicle that brought about change and this discussion aims to bring forward understandings of why change has happened, rather than how, and therefore considers the drivers for change, the reported changes and perceived threats of change.

- Drivers for change

The intentions for strengthening the EHEA were originally envisioned through a culture of harmonisation that would have served for European universities to be more competitive with non-European universities (*Sorbonne declaration* 1998). The same intentions however, also exposed the differences that existed within the EHEA with the consequence that different systems changed in order to meet the Bologna Process demands. Organisations make changes when their environment demands them to do so (Vermeulen, Puranam and Gulati 2010). This is normally influenced by the competition that is created between rival organisations. With the Bologna Process

however, the process of change, may in some cases have taken place without any determination to, or comprehension of, the need for change. There was therefore a mixed picture of some areas seeing the need for, and embracing change brought by the Bologna Process, and others that seemed unaware of the need for, or appetite to implement change.

However, at the level of individual institutions, it appears that the Bologna Process certainly did lead to change. This happened within a context of the ministers responsible for higher education actually signing the Bologna Declaration without much deliberation with the academic institutions and bodies that would be involved; and it has been argued that this was possibly led by the neo-liberal ideologies and right-wing/industry led arguments influencing national governments at the time (Mayo 2012). As a result, educational institutions and the physiotherapy programmes within them, found themselves thrown into a process of change and perhaps having to implement the Process as an afterthought, rather than in planned anticipation.

Physiotherapy programmes that were more positively motivated towards the Bologna Process saw the opportunity to raise their institutional status, converging the curriculum of studies within their own country or restructuring their programmes altogether. These motivations find social meaning in the considerations on harmonisation and egalitarianism that will be discussed later. The idea that any particular programme would want to change for its own sake could provoke scepticism. Yet periodical shake-ups are necessary irrespective of external drivers such as competition, as the internal environment would probably warrant change irrespective of the external dynamics (Vermeulen, Puranam and Gulati 2010). The findings of this study have shown that in some countries the Bologna Process brought a lot of aspiration for change as the physiotherapy profession had long been recognising a need for development. The implementation of the Bologna Process provided a perfect opportunity to bring about change that was perceived as being Europe-led and therefore universally regarded.

For the physiotherapy programmes in Austria, Estonia, Italy, Portugal and Spain it appears that the need for change had long been felt and that it also had a purpose - to meet the higher standards of European counterparts; the process did not matter too much as long as the purpose was met. Other physiotherapy programmes whose

organisational structure was already similar to most of the Bologna ideals such as those in Sweden and Finland, or whose professional status was highly regarded, as in the United Kingdom, either did not recognise or establish a need for change in line with the Bologna objectives.

- Reported changes

Significant changes in the organisation of physiotherapy programmes as a result of the Bologna Process have been noted. Curricula have been reorganised and degree programmes have been extended in Spain. Degree programmes have been shortened in Austria, Estonia, Italy, the Netherlands, Portugal, and Switzerland. Influences on the educational system were reported in the furtherance of higher education by including a Master cycle or developing the systems towards a more student-centred approach. Even lecturers were reported to have been compelled to consider their approaches towards teaching, having to deliver within shorter time periods in more transparent ways and focusing on learning rather than teaching methods.

The important changes that were observed developed at an institutional level, particularly the developments of curricula, facilitated mobility, increased transparency within the education levels and learning goals, the development of active strategies (such as student-centred learning and other learning and teaching strategies, credit systems, mobility and internationalisation), better recognition of local programmes of study and aspirations for higher status. These changes were not the result of a self-diagnosed problem or a conscious decision for change that followed internal assessments into the motivations and capacity for change. On the contrary, the change was practically imposed by the Bologna Process. The literature surrounding change theory would appear to suggest that the climate of change was very rational and plan-oriented and seems to have followed Kurt Lewin's three-step change theory (Schein 1999) of unfreezing the status quo, moving the target system to a new point of equilibrium and then refreezing the implemented changes to be sustained over time.

Since 1999, physiotherapy programmes within the remits of their respective higher education institutions, have been considering their operational practices in the light of



the Bologna Process. The unfreezing process was accomplished by them working independently and also in cooperation with others in a reflection on the existing situations, by recognising the issues and discussing the solutions. The second step was achieved by implementing the changes at the institutional level. These changes are still on-going and have not been met with the same level of enthusiasm and application. The final step will be achieved once the process is fully implemented, fine-tuned and accepted by all the parties involved. At this point the new equilibrium will result from the change in the form of formal mechanisms including transparent policies and procedures.

- Threats of change

The unfreezing process of change has not been met with enthusiasm everywhere especially where certain methods had been embraced for many years. More for emotional than logical reasons, people tend to base expectations on the status quo (Zeikel 1975). Furthermore, when change was not the result of a self-determined process but perceived to be an imposition, as it would appear the Bologna Process has been, it has been understood that change was at times met with resistance as it came with a lot of adaptation.

Education institutions are structured on functional criteria and the problem with this is that communication and collaboration tend to become trapped in functional silos (Vermeulen, Puranam and Gulati 2010). As a result the institution may fail to recognise the opportunities that change may offer. The Bologna Process has been shown not to be as restrictive as it has been portrayed; it allows for so much leverage within its objectives that most often this had led to more confusion. The view of the convergence of systems - and indirectly the changing of systems - must be seen in the light of two changes. The first change requires an adaption towards the Bologna principle. The second change requires for the particular system or model to be implemented. These two processes of change are distinct: the former conceptual and the latter factual - and it has not been easy to distinguish between these changes. Eventually time will tell whether change has been met with a beneficial consequence or not.



### 8.3.2 Harmonisation and Diversity Issues

The controversy of harmonisation versus diversity has been the basis for numerous discussions on the Bologna Process (Neave 2003, Huisman, Witte and File 2006, Witte 2008). Within physiotherapy the issues are not shortcoming. A number of different arguments were raised by the participants in the interviews that appeared to favour both the conservation of diverse systems and also of harmonised systems. So, for example, diversity was favoured through discussions on the protection of cultural identity; the understanding that health care approaches were different in different countries and that as a consequence this had to be reflected in the content of programmes; and the need for innovative practices. It was however also noted that certain conditions had to exist, such as core competences, and that diversity demanded a certain amount of generosity and openness amongst the different systems to agree on a minimum level of accomplishment. On the other hand, harmonisation was favoured through discussions on facilitating awareness; avoidance of dysfunctional systems that would not permit mobility even between universities in the same country; bridging the gaps between the traditional universities and those universities dedicated to applied sciences; securing status; having a common core competence level; and to facilitate student and worker mobility.

In order to start understanding the nature of the different standpoints it is necessary to distinguish between the conceptual elements of the Bologna objectives and the realities as they actually turned out to be. For example, the adoption of a system based on cycles (Bologna Objective 2) may be considered a harmonised process from its conceptual aspect, but the implementation of the various models has been shown to be undoubtedly diverse in reality. In this study, diversity was understood as being *'an instance composed of differing elements or qualities'*<sup>20</sup> and most especially not referring to the inclusion of different types of people. Much of the literature on organisational and cultural diversity revolves around the diverse inclusion of culture, beliefs and values on a personal basis. This is not the intention of this discussion. Harmonisation was understood to be the process of ascertaining the admitted limits of international unification but does not necessarily amount to a vision of total uniformity (Menski 2006). Effectively, it is the harmonisation of law that is being discussed. This

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<sup>20</sup> 2012 Merriam-Webster definition: <http://www.merriam-webster.com/dictionary/diversity>

is an important concept within the European Union that allows for the creation of common standards across the region albeit that the Bologna Process and the Bologna Declaration are not legally binding European agreements.

The issues regarding the harmonisation of systems, although not clear, could be separated into two broad arguments. The first argument favours the convergence of systems and the second argument favours keeping the systems diverse. Diverging systems do not necessarily imply opposing systems; they could simply be different systems. These differences result as a consequence of cultural and institutional factors at a national level. In this sense the roots for such differences lie in nationalism.

Nationalism is an ideology that has both a primordial and modern perspective. Within the context of physiotherapy education it has been understood that different countries want to maintain their national identity within their curricula because, amongst other things, respective national health care systems are different. In this sense cultural influences on a national level must be understood and addressed within the education systems. Yet it has also been reported that cultural differences also need to be understood and that physiotherapists should pay attention to them. Such examples embrace the modern interpretation of nationalism where societies are associated with having self-sustaining economies, a central supreme authority and a central language or group of languages that is understood by the community of people (Miscevic 2010). The interpretation of the ideals of the Bologna Process in practice is rather different, and resonates with the different versions of a language (dialect) that may be found in a country without risk of losing national identity. This appears to be an accepted normality for differences even within the same country with different schools reporting to focus on different aspects of health care such as health promotion or rehabilitation. This was even regarded as being essential to avoid 'clones of physiotherapists' and to allow diversity of practice also at the place of work.

The understanding that the core essentials for physiotherapy education can be similar, but with an option to adopt different approaches, leads one to believe that for physiotherapy education, the controversy of harmonisation versus diversity does not exist. Rather, the general agreement is that the Bologna Process has a harmonised framework with a diverse content and that it is perceived as 'good'. It is good because whilst it appears to portray a European identity, it allows for national factors to be considered with a fair amount of flexibility and openness.

These arguments echo the Italian phrase '*convergenze parallele*' (parallel convergences) attributed to the assassinated Italian Prime Minister Aldo Moro, who in the 50's and 60's worked towards finding a political compromise with his adversaries. In reality, a parallel convergence is a paradox and the term is an oxymoron, but one can imagine that the closer that two parallel lines get together, the greater is the chance of them being seen as one, even though they remain different. This would be the concept of the convergence around common practices (Bologna Declaration 1999) that shifted from the original intention of harmonisation (Sorbonne Declaration 1998). A balance between diversity and harmonisation was espoused to be ideal as it created an awareness of what was happening around Europe whilst at the same time maintaining individuality and nationality.

### **8.3.3 Europeanisation**

The aim of the discussion around Europeanisation is to indicate how physiotherapy education, through the context of the Bologna Process, fits into a notion of European identity. Europeanisation is as perplexing as the different dimensions through which it is interpreted (Howell 2002, Corbett 2004, Sittermann and Zivilgesellschaft 2006). Different definitions of Europeanisation exist depending on the context in which it is discussed: cultural, political or historical. In a very general way, this discussion will refer to Europeanisation as the process of becoming more European.

The aim of the Bologna Declaration was to increase international competitiveness and attractiveness of the European system of higher education by pushing forward reforms in higher education governance that would result in a common European identity – the European higher education area. This took place amongst concerns that homogenisation could imply loss of national identity but was justified by intense global economic competition (Corbett 2004). It may be argued that the Bologna Process in itself is a process of Europeanisation – taken to be the impact of the European Union on its member states (Ladrech 2008). Yet the effects are different both across and within states and across different dimensions (Corbett 2004, Heinze and Knill 2008). Physiotherapy in higher education has responded in various ways to achieve the goals of the Bologna Process and indirectly the European identity. The findings in this study



have shown that the impact within and across Europe has had different effects, such as improving dialogue, bridging the education aspects and the profession, and employment; yet most prominently it has been reported to promote mobility giving sense to the ERASMUS programme.

Mobility is recognised as one of the hallmarks of the Bologna Process. The ERASMUS programme was designed to stimulate student mobility and university cooperation and in 1987 had remarkably achieved being legislated for and completely funded by the EU processes (Corbett 2004). Right from the start, major concerns were related to barriers to mobility; these are still persisting to this present day. Mobility processes activated policy formulation and cooperation between universities. As a consequence, the different academic values across Europe needed to be appreciated and respected and this in itself contributing to the process of Europeanisation. Physiotherapy did not fall behind. The creation of the networks like Enphe and the working groups within ER-WCPT that are specifically related to education, and in which dialogue is regarded as important, have facilitated this process.

The process of Europeanisation has also brought the physiotherapy profession closer to universities because the delivery of well-educated physiotherapists to the European workforce had developed primarily with potential mobility in mind. It has already been reported that physiotherapists are the fourth most mobile profession in Europe. Physiotherapy educationalists must keep this in mind and be concerned with the health and well-being of the European patient too; and also the potential employment of the graduates. In this sense we could be moving towards a European patient and a European physiotherapist.

The complexity of European policy-making processes has been noted and not surprisingly the Bologna Process has been extended beyond 2010. The convergence in the higher education systems means that they must work within rules of flexible governance shaped by European strategic agreements (Corbett 2004). These European norms include the knowledge economy and single market services and as such, as signatories to the Bologna Process, all countries have adopted the Europeanisation agenda.



### 8.3.4 Egalitarianism

Egalitarianism is a trend of thought in political philosophy that tends towards favouring equality of some sort. The preliminary distinctions towards egalitarianism are contested in social and political thought and may be viewed through arguments that are instrumental or non-instrumental, conditional or unconditional, desirable or undesirable and with a variety of roles (Arneson 2009). For many physiotherapy programmes this process was reported to commence by taking physiotherapy to the echelons of higher education and therefore into the universities.

The term egalitarianism in the context of this discussion is based on the professional, educational and political references made by the participants in this study. The claims towards a more egalitarian system on a European level were made by representatives from those countries where the status of physiotherapy within the educational system is in parallel to, or lower than higher education; or whose education system has only recently been integrated into the higher education as a consequence of the Bologna Process.

The principle of egalitarianism was understood to imply that on a European level a physiotherapist is a physiotherapist independent of where the qualification was obtained. This ties in strongly with the elements of recognition on which the Bologna Process is built and that was discussed earlier in the chapter. If a qualification needs to be recognised in another state, then that qualification must merit that recognition. It is not therefore enough for an individual to desire recognition; egalitarianism does not rest on desirability. However individuals have the right to desire and expect that their education system is at par with their European counterparts. The aims of the Bologna Process to converge on the common practices provide distributive justice that rest on the desert-based principles<sup>21</sup> (Lamont and Favor 2012). The pleas for a level playing field are in fact directed towards one's own systems – aiming and hoping to achieve an equal status on a European level and not intending for the European level to succumb to their lower threshold. This connects with both the principles of harmonisation of law and Europeanisation.

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<sup>21</sup> The different desert-based principles of distribution differ primarily according to what they identify as the basis for deserving. Most contemporary proposals for desert-bases fit into one of three broad categories: Contribution, Effort and Compensation

### 8.3.5 Unbeknown

A final reflection is towards a concept of unbeknown. Unbeknown is defined as *'happening or existing without the knowledge of someone specified'* (Merriam-Webster Dictionary 2012). Within the context of this study, I am referring to this as a reflection on a number of 'Unknown' or 'Do not know' responses to the survey questionnaires and also the reported misconceptions/misunderstandings and/or misinterpretations of the Bologna Process.

At the beginning of this study an assumption was made that the participants were knowledgeable about the Bologna Process and they were selected purposefully due to their positions as leaders of physiotherapy education programmes or country coordinators.

When we do something, whatever it is, we would do it under the assumption that we know why we are doing what we do. When a decision is taken by someone else on our behalf, we may accept it on the assumption that the decision was taken following a careful and judgmental consideration. However, where we deny or question a decision, it is on an assumption that the decision was not taken in the same thoughtful way. We assume that we take a decision when we can anticipate what the expected outcome may be. Some might call it evidence based practice. The reason is that the decision was taken following a thoughtful consideration of the evidence or documentation available, and that is readily accessible, and that may be defended or argued against.

In other words, any decision should be taken in a rational way. Rationalisation involves and invokes thinking. And when we perform an action without thinking or considering about the consequences of our actions, or when we take a decision without knowing why we are invoked to take that decision, then we would be acting in an irrational manner. Also, considering any actions taken without the knowledge or thought of why they are being taken, means, that we would be functioning in an environment of unbeknown. The findings of this study indicate that a small number of the participants were operating in the concept of unbeknown with respect to the Bologna Process.

This carries consequences for physiotherapy in higher education. If for example, a head of department did not understand why or from where the attribution of hours

per ECTS was underpinned, or attributed this solely to the 'fact of the Bologna Process', then it would make the judgement and assessment of its outcomes questionable. The implications for physiotherapy education are that leaders must be aware of all the consequences of the Bologna Process, because the Bologna Process exists, and if the Bologna Process is not to fail. Physiotherapy education does not exist in isolation in the spheres of higher education. Rightly and justly it needs to fit into the general picture. The findings of this study have shown that the overwhelming majority of the leaders in physiotherapy education are aware of the Bologna Process and its implications and they have debated the policies in an open and transparent way. However, they must keep abreast with the developments and the implications of the different models if physiotherapy education is to maintain and strengthen its position in higher education.

## Conclusion

This section has visited some thoughts that emerged during and following the analytic process through different concepts related to change, harmonisation & diversity, Europeanisation, egalitarianism and unbeknown.

This section also concludes the discussion chapter of this thesis. This chapter has also discussed the usefulness of case study methodology in addressing the research questions and the main findings of the study in the light of the objectives.

The next and final part of this thesis will be the Conclusion.

# Chapter 9

## *Implications and Conclusions*



Chapter 9 is the last chapter of this thesis and brings this study to an end. At the same time it opens the door for further research.

### **9.1 Rounding up the study**

Consciously or otherwise, the Bologna Process would appear to have had an influence on physiotherapy in higher education and as a consequence also on physiotherapy practice; and any developments that were shaped as a result of it cannot be ignored. The findings from this study are important and they lay down a foundation for further study into both the conceptual and strategic organisational design for physiotherapy education. Cultural factors appear to have played an important role in the introduction of the Bologna reforms. This is supported by the way that degree programmes were structured or restructured across Europe in different ways and for different reasons. Especially in those countries where physiotherapy education was positioned at a lower level than other academic degrees, the Bologna arguments were decoded in a manner that served as a springboard to bridge the differences. This included establishing physiotherapy education within the higher education activities of universities.

The different systems of higher education institutions have exerted different influences, in the light of the Bologna Process, on physiotherapy education across Europe. The positioning of physiotherapy education within the national education systems across Europe is diverse. This is supported by the finding of parallel systems such as the University and the University of Applied Sciences in many countries. The organisation of physiotherapy education activities are controlled within these different systems and are consequently dependent on different operational mechanisms, such as funding. So, for example, although in principle the Bologna Process has been implemented, the opportunities to pursue master and doctoral degrees effectively means that in certain countries physiotherapy students would require to change institutions. At times this also resulted in them having to add an extra year to their studies.

The socio-economic influences also had a strong effect on the convergence of the Bologna objectives. Even though it is generally understood that a four-year undergraduate degree programme is more appropriate for entry into the physiotherapy profession, economic restrictions have resulted in the emergence of the more popular three-year programmes. It is reported in this study that shorter degrees were perceived to result in lower quality. It was generally accepted that alternative strategies had to be considered, such as raising the entry-level into the profession to a Master level. Such a consideration raises two predicaments: first, that entry-level at Master level goes against the spirit of the EHEA to provide appropriate employment opportunities with undergraduate education (Bachelor level); and second, that the qualification platform for physiotherapy studies is diverse. This has been explicated in the discrepancy of the total hours of physiotherapy education in different programmes across Europe. The unfortunate consequence of this is that degrees would not be recognised in other countries, once again bypassing the spirit of the EHEA for comparable and compatible degrees. The essence of this is that physiotherapy, even though recognised as an academic degree, remains a professional qualification.

This study has sought to understand the experiences of key players across Europe in the context of the Bologna Process. It has found that change was met in an important way in most countries. The management of change also espoused diversity in the different outcomes that were guided by different contexts that included culture, institutional autonomy and socio-economic factors. The overall reflection is that whilst change was met within the spirit of harmonisation or convergence, the outcomes are diverse. This is particularly important to quell those proponents strictly in favour or against the harmonisation process, because, as it transpires, the Bologna Process has resulted in the formation of a harmonised framework with a diverse content. The extent of the influence of the Bologna Process on physiotherapy education is limited by unintended outcomes such as the financial constraints. These have resulted in the development of the shorter degrees with the unintended consequence of limited opportunities for mobility. Widening access to study physiotherapy has to also consider the labour market requirements and not to generally increase access to higher education.

The implications of the findings from this study are that they lay down a foundation for further study into the conceptual and strategic organisational designs for future

physiotherapy education. Although it appears that the Bologna Process has impacted on physiotherapy education, further support is needed to help interpret the objectives of the Bologna Process in a context specific way. The traditional and current models of physiotherapy in higher education might need to be reconsidered in the light of the findings of this study. Changes in programme delivery and structure need to be placed in context to understand the purpose of change and to anticipate and measure change, within a paradigm that recognises where physiotherapy has started and where it is heading.

## **9.2 Conclusion**

This study set off to understand the influences of the Bologna Process on physiotherapy education. It has investigated the extent of the engagement with the objectives of the Bologna Process within physiotherapy education programmes and aimed to elicit the different perspectives held by leaders in physiotherapy education across Europe in the light of the Bologna Process. The Bologna Process was found to have had an influence on the organisational governance of physiotherapy in higher education across Europe. Three key findings that emerged from this study show that these influences were on the degree structure and duration of programmes; mobility and quality. Issues of harmonisation & diversity were also identified in relation to understanding the social factors that have determined and shaped any influences. Different approaches were found to be guided by the different cultural, institutional and socio-economic influences. The influences of European policies, such as the Bologna Process, on changes recognised within physiotherapy education have taken place within the contexts of wider social issues of Europeanisation and egalitarianism. The reflection towards the 'unbeknown' attitudes in educational processes cannot be undervalued, particularly when changes happen that will affect the outcome of a profession's future. Further examination and study is warranted into how any immediate changes are influencing the future of the physiotherapy profession, guided in principle by what is expected from the profession by the professionals themselves and by society. As it stands, the risk is that the physiotherapists in the future will not meet the academic (education) and professional (practice) fitness purposes on an equal foothold.

Word Count: 66,760



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## Appendices

## Appendix 1

The three major models which have influenced higher education developments according to Gellert (1999).



### Personal Development Model

- personal development model
- ideal of liberal education
- aimed at the student
- Cardinal Newman
- Oxford movement
- + 300 years
- US and English-speaking countries



### Research Model

- Humboldtian model
- research model
- aimed at the discipline
- 19th century
- Most European states



### Professional Training Model

- Napoleonic or
- professional training model
- learning for the professions
- leaves research outside the university
- used in most Mediterranean and Eastern European countries

## **Appendix 2**

Summary of Physiotherapy Education within the National Educational System – report published by the European Region World Confederation of Physiotherapists (2005)

## Summary of Physiotherapy Education within the National Educational System - 2005

Country	Basic / initial Physiotherapy Education						Academic	
	Giving Access to the practice of Physiotherapy / use of title of Physiotherapist, accordingly with the legislation of the country						Post Graduate Education	Academic
	Number of Years of school needed for Access to PT Education	Number of years of PT Education	Status of PT education Within the national Educational System (1)	Academic degree awarded	Number of Physiotherapy Programmes officially recognised	Approximate Number of New students Entering PT Programmes (each year)	Approximate Number of Students qualifying for practice as physiotherapists (each year)	Basic / Initial PT education gives direct access to the following Higher Academic Degrees (2)
<u>Austria</u>	12	3	Hig. Educ	Dipl. PT	1	400	350	MSc and PhD
<u>Belgium</u>	12	4-5	Hig. Educ	Licencier	NA	NA	NA	MSc and PhD
<u>Bulgaria</u>	12	4	Hig. Educ	BSc	3	140	120	MSc and PhD
	12	3	Hig. Educ No university level	Diploma	6	180	150	Bridge System
<u>Croatia - 2003</u>	8	4	Sec. Educ	No	NA	NA	NA	No
	12	3	Parallel	No	3	180	180	No
<u>Cyprus</u>				No Physiotherapy Education in Cyprus				
<u>Czech Republic</u>	12	3	Hig. Educ	Diploma	10-13	300	250	No
	12	3 / 5	Hig. Educ	BA / MA	8	200	180	MSc and PhD
<u>Denmark</u>	12	3½	Hig. Educ	BSc	8	640	630	MSc and PhD
	Basic / initial Physiotherapy Education						Academic	
	Giving Access to the practice of Physiotherapy / use of title of Physiotherapist, accordingly with the legislation of the country						Post Graduate Education	





# EUROPEAN REGION OF THE WORLD CONFEDERATION FOR PHYSICAL THERAPY

Country	Number of Years of school needed for Access to PT Education	Number of years of PT Education	Status of PT education Within the national Educational System (1)	Academic degree awarded	Number of Physiotherapy Programmes officially recognised	Approximate Number of New students Entering PT Programmes (each year)	Approximate Number of Students qualifying for practice as physiotherapists (each year)	Basic / Initial PT education gives direct access to the following Higher Academic Degrees (2)
<u>Estonia</u>	12	3	Hig. Educ	Bachelor	1	35	25	MSc
	12	3	Parallel	Diploma	1	25	15	MSc
<u>Finland</u>	12	4	Hig. Educ.	NA	17	400	350	MSc and PhD
<u>France</u>	12	3-4	Parallel	NA	NA	1540	1500	Bridge System
<u>Germany</u>	10	3	Sec. Educ	No degree	246	9500	7500	Bridge System
	12	3 or 4	Hig. Educ	BA, MA or Diplom	10	180	NA	MSc
<u>Greece</u>	18	4	Hig. Educ	Ptyxio Fysikotherapeis	4	280-300	200	MSc Yes PhD No
<u>Hungary</u>	12	4	Hig. Educ	Diploma	1	550	500	MSc Yes PhD Bridge System
<u>Iceland</u>	14	4	Hig. Educ	BSc	1	20	17	MSc
<u>Ireland</u>	13 - 14	3 - 4	Hig. Educ		4	26-60	26-60	MSc and PhD
<u>Italy</u>	13	3	Hig. Educ	Laurea	39	2500	1500	MSc Bridge System
<u>Latvia</u>	12	4	Hig. Educ	BA	3	60-80	40-55	MSc and PhD
<u>Lebanon</u>	13	4	Hig. Educ	B.S(licence)	1	65	50	MSc
	<p><b>Giving Access to the practice of Physiotherapy / use of title of Physiotherapist, accordingly with the legislation of the country</b></p> <p><b>Basic / Initial Physiotherapy Education</b></p> <p><b>Academic Post Graduate Education</b></p>							

Country	Number of Years of school needed for Access to PT Education	Number of years of PT Education	Status of PT education Within the national Educational System (1)	Academic degree awarded	Number of Physiotherapy Programmes officially recognised	Approximate Number of New students Entering PT Programmes (each year)	Approximate Number of Students qualifying for practice as physiotherapists (each year)	Basic / Initial PT education gives direct access to the following Higher Academic Degrees (2)
<u>Liechtenstein</u>						No Physiotherapy Education in Liechtenstein		
<u>Lithuania 2003</u>								
<u>Luxembourg</u>						No Physiotherapy Education in Luxembourg		
<u>Netherlands</u>	13	4	Hig. Educ	Bachelor	11	1800	950	MSc yes and PhD no
<u>Norway</u>	13	4	Hig. Educ	Bachelor	5	350	300	MSc and PhD
<u>Poland 2003</u>	12	3	Parallel	Batcheler	NA	NA	NA	Bridge System
	12	5	Hig. Educ	Master	NA	NA	NA	MSc and PhD
<u>Portugal 2003</u>	12	3+1	Hig. Educ	Licenciatura	14	600	200	MSc and PhD
<u>Romania 2003</u>	12	4	Hig. Educ	Licence	1	800	800	MSc and PhD
<u>Serbia and Montenegro</u>	12	3	Hig. Educ	Diploma	3	400	100	No
	8	2+2	Sec. Educ	PT technician	12	360	300	No
<u>Slovenia</u>	13	3	Hig. Educ	BSc	1	40-55	52	Bridge System
<u>Spain</u>	12	3	Hig. Educ	Diploma	1	3200	2600	Bridge System
<u>Sweden</u>	13	3	Hig. Educ	BSc	8	620	550	MSc and PhD
<u>Switzerland</u>	12	4	Parallel	Diploma	14	300	300	Postgraduate studies
<u>Turkey</u>	11	4	Hig. Educ	Bachelor	8	350	300	MSc and PhD
	<b>Giving Access to the practice of Physiotherapy / use of title of Physiotherapist, accordingly with the legislation of the country</b> <b>Basic / initial Physiotherapy Education</b> <b>Academic</b> <b>Post Graduate Education</b>							



# EUROPEAN REGION OF THE WORLD CONFEDERATION FOR PHYSICAL THERAPY

Country	Number of Years of school needed for Access to PT Education	Number of years of PT Education	Status of PT education Within the national Educational System (1)	Academic degree awarded	Number of Physiotherapy Programmes officially recognised	Approximate Number of New students Entering PT Programmes (each year)	Approximate Number of Students qualifying for practice as physiotherapists (each year)	Basic / Initial PT education gives direct access to the following Higher Academic Degrees (2)
<u>United Kingdom</u>	13	2-4	Hig. Educ	BSc	47	2563	1836	MSc yes / PhD No
	13+3	(3-4)+2*	Hig. Educ	MSc	13	241	128	

Source: European Region of WCPT - Information provided by the Member Organisations by June 2003

\* Graduates will have completed a 3/4 year first degree in a science related subjects plus two years full time MSc programme in physiotherapy.

## **Abbreviations used**

PT – Physiotherapy / Physical Therapy

NA – information Not Available

## **(1) Status of PT education within the national Educational System**

**Sec. Educ.** - Secondary / professional education – If the entry level is lower than the normal entry level for Higher Education, in the country.

**Parallel** – Post secondary / Parallel to Higher education - If the entry level is the same as for Higher Education, but the PT education is not officially considered as part of Higher Education

**Hig. Educ.** – Higher Education - if PT Education is officially considered as part of Higher Education (University or other kind of Higher Education, for example Polytechnic)

**(2) – Bridge System** – When there is no direct access to higher academic degrees, but there is a bridge system that allows that possibility

## **Appendix 3: Europe in context**

### **Participating Countries in the Bologna Process (47):**

Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Holy See, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom

### **Participating countries in ENPHE (28):**

Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lebanon, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Spain, Sweden, Switzerland, Turkey, United Kingdom

### **European Union Countries (27):**

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom

### **EFTA/EEA Countries (4):**

(European Free Trade Association/European Economic Area)

Iceland, Liechtenstein, Norway, Switzerland

### **ER-WCPT Member Organisations (35):**

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lebanon, Liechtenstein, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom



## **Appendix 4**

The Survey Questionnaire to the Heads of Departments Group

# Survey questionnaire to Physiotherapy schools across Europe

## 1. Survey Questionnaire - The Bologna Process and physiotherapy education in Europe

Dear Head of Department,

You are kindly asked to complete this questionnaire that is exploring the influence of the Bologna Process on physiotherapy study programmes across Europe.

This questionnaire forms the basis for part of a research project that is being conducted to fulfil the requirements leading to a PhD. A covering letter is attached to the email that you have received and from which you have accessed this survey.

You have been identified as being the Head/Co-ordinator of the Physiotherapy Department in your institution. All questions asked make reference to the physiotherapy programmes offered in your institution.

You may complete this questionnaire by clicking on the appropriate response buttons and where indicated you have the possibility to mark more than one choice of response. You may proceed from page to page by clicking the 'NEXT' button at the bottom of the screen, just below the progress bar that will indicate to you how far into the questionnaire you have arrived. You also have the option of going back through the pages by clicking on the 'PREV' button.

Before completing the questionnaire, please ensure that you have addressed all the questions. There is only one forced answer, that is the country tab. Once you complete the survey by clicking on the 'DONE' button at the end of the last page, you will not be able to correct or amend your responses. Should you wish to exit the survey at any time you may do this by clicking on 'Exit this survey' on the top right-hand corner of the page.

The time anticipated to complete the survey is about 15-30 minutes.

By completing this survey you will be contributing to increasing the knowledge on the influences of the Bologna Process in physiotherapy education. As a first survey of this nature, the information shall be very valuable to the physiotherapy community. It is intended to submit the results for publication.

Your participation is entirely voluntary and no records are being kept that will identify you personally as a respondent. Any reference to replies shall remain on a country basis and where possible countries shall be grouped.

If you have any queries or questions please contact the researcher by e-mail: [john.xerri-decaro@um.edu.mt](mailto:john.xerri-decaro@um.edu.mt) or by phone: +356 9942 4404

Alternatively, you may contact the Director of Studies at Sheffield Hallam University, Ms. Maria Burton, e-mail - [M.Burton@shu.ac.uk](mailto:M.Burton@shu.ac.uk)

You may commence the survey by clicking the 'NEXT' button below.

Thank you.

John Xerri de Caro  
B.Sc.(Hons) Physiotherapy, M.Sc.  
PhD student at Sheffield Hallam University

## 2. The Bologna Process

1. Are you aware of the Bologna Process?

☐ Yes

☐ No

## 3. The Bologna Process

### 2. How do you rate your understanding on the Bologna Process?

- ☐ Very knowledgeable      ☐ Somewhat knowledgeable      ☐ Little knowledge      ☐ Not knowledgeable

### 3. How do you rate the importance of the Bologna Process for the organisation of the physiotherapy programmes in your department?

- ☐ Very important      ☐ Somewhat important      ☐ Little importance      ☐ Not important

### 4. Has the Bologna Process influenced any change in the organisation of the physiotherapy programmes in your department?

- ☐ Yes, to a large extent      ☐ Only slightly      ☐ No      ☐ Don't know



## 4. General questions

### \* 5. Country

### 6. Does your department form part of a private or a public institution?

- ☐ Private Institution
- ☐ Public Institution
- ☐ Other (please specify)

### 7. What is the status of your institution within the national education system?

- ☐ Higher Education
- ☐ Parallel system to Higher education (same entry level as for Higher Education, but not officially considered)
- ☐ Professional/Vocational (entry level being lower than that for Higher Education)
- ☐ Other (please specify)

### 8. Which statement describes the 'status quo' of physiotherapy within your Institution

- ☐ Physiotherapy is the only programme
- ☐ Physiotherapy is one of other programmes offered

### 9. Is your institution a member of the European Network of Physiotherapy in Higher Education (ENPHE)?

- ☐ Yes
- ☐ No

5. Degree structure and duration of programmes

For the purpose of this questionnaire, degree programmes shall be understood to refer as follows:

- 1st cycle - Bachelor level or Bachelor degree,
- 2nd cycle - Master level or Master degree,
- 3rd cycle - Doctoral level or Doctoral degree

10. Which of these degrees for physiotherapists are offered by your department? (select any)

- ☐ Bachelor degree
- ☐ Master degree
- ☐ Doctoral degree

11. At each level, what is the duration of the physiotherapy programme (Full time equivalent, years)?

(If your department offers separate physiotherapy degrees of different duration, please indicate by ticking all appropriate boxes.  
N/A: not applicable or degree is not offered))

	N/A	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Bachelor degree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Master degree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doctoral degree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comment	<input type="text"/>											

12. Are the learning outcomes specified for each of the following programmes offered:

	Yes	No	Don't know	Not applicable
Bachelor degree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Master degree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Doctoral degree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 6. Qualifications framework

A Qualifications Framework is primarily an official document that clearly defines each and every qualification brought under it. It may also provide a hierarchy of qualifications. In system view it is a meta-data model that is an all encompassing framework to integrate the qualifications issued by different academic bodies into a common structure. It consists of a set of common reference points, referring to learning outcomes, supported by a range of tools and techniques, regardless of the system where a particular qualification was acquired.

The European Qualifications Framework (EQF) was formally adopted by the European Parliament and the Council in 2008 to create a translating facility for referencing academic degrees and other learning qualifications among EU member states. It is designed to allow national qualifications frameworks to be cross referenced.

### 13. Which qualifications framework does your institution adhere to?

- ☐ Don't know
- ☐ Qualifications Framework linked to the EQF
- ☐ Qualifications Framework different to the EQF

## 7. Quality assurance

Quality assurance refers to a program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met. The European Association for Quality Assurance in Higher Education (ENQA) developed the European Standards and Guidelines for Quality Assurance (ESG).

More information on QA may be accessed on <http://www.enqa.eu/pubs.lasso>

### 14. Does your department follow the European Standards and Guidelines for Quality Assurance (ESG)?

- ☐ Yes
- ☐ No
- ☐ Don't know

### 15. Does your department engage in internal quality assurance practices?

- ☐ Yes
- ☐ No
- ☐ Don't know

### 16. Does your department engage in external quality assurance practices?

- ☐ Yes
- ☐ No
- ☐ Don't know

### 17. Does your department publish quality audits?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Not applicable (we do not carry out quality audits)

### 18. Are students involved in quality assurance evaluation?

- ☐ Yes
- ☐ No
- ☐ Don't know



## 8. Recognition

**19. Does a Bachelor (1st cycle) qualification from your institution allow automatic entry into the profession in your country?**

- ☐ Yes, graduates may start practicing physiotherapy immediately
- ☐ Yes, but graduates require to register with the competent regulatory authority
- ☐ No, graduates from a first cycle require a period of internship
- ☐ No, entry level into the profession is at a higher level than Bachelor
- ☐ Don't know

**20. Is entry into a Master level (2nd cycle) within your institution automatic following a Bachelor level (1st cycle) qualification?**

- ☐ Yes
- ☐ No

9. Social Dimensions

21. How many years of formal obligatory education (excluding kindergarten) are required by students to enter a 1st cycle (Bachelor level) physiotherapy programme in your institution?

- ☐ <12
- ☐ 12
- ☐ 13
- ☐ 14
- ☐ 15
- ☐ >15

22. What is the approximate tuition fee for a 1st cycle (Bachelor level) physiotherapy programme in your institution?

- ☐ < €1,000
- ☐ €1,000 - €5,000
- ☐ €5,000 - €7,500
- ☐ €7,500 - €10,000
- ☐ > €10,000
- ☐ Free education
- ☐ Students are paid a stipend to participate

23. Does your institution have a limited number of admissions to a 1st cycle (Bachelor level) physiotherapy programme?

- ☐ No, admission is open
- ☐ Yes, the number of students accepted is
- 

24. At each level, are students offered flexible learning pathways (such as part-time study or study breaks)

	Yes	No	Not Applicable
Bachelor level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Master level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Doctoral level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments

**25. Do full time doctoral candidates have the opportunity to be employed by your institution as early-stage researchers (hence benefiting from salary and social security/pension rights)?**

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Not applicable

10. Employability

26. How many hours (minimum requirement) do physiotherapy students spend in clinical practice throughout the 1st cycle (Bachelor level)?

- ☐ 0 hours
- ☐ 1001 - 1200 hours
- ☐ 1 - 500 hours
- ☐ 1201 - 1500 hours
- ☐ 500 - 750 hours
- ☐ > 1500 hours
- ☐ 751 - 1000 hours

27. At the end of their study period, are physiotherapy students offered

	Officially Yes	Most often	Sometimes	No	Don't know
Information on employment related issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advice and guidance on employment opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. Following successful completion of study, where do the majority of the graduates from your department find employment?

- ☐ Public services
- ☐ Private practices
- ☐ Industry
- ☐ Don't know

Other (please specify)



## 11. Lifelong Learning (LLL)

**29. Does your department organise LLL activities (such as continuing education, continuing professional development) in physiotherapy?**

- ☐ Yes
- ☐ No
- ☐ Don't know

**30. Do formal partnerships for LLL in physiotherapy exist with**

	Yes	No	Don't know
Public authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Higher Education Institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching institutions not in higher education level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Global dimension

The global dimension refers to the interactions in higher education between institutions (hence their students/teachers and administrators) from other countries within Europe and outside Europe.

The European Union includes the 27 member states:  
Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom

31. During the last year, did your department enrol physiotherapy students, other than 'home students', whose nationality was from

	Yes	No	Don't know
EU countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
non-EU countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
non-European countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. Does your department employ physiotherapy teachers from other countries?

	Yes	No	Don't know
In Europe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside Europe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. Is your department currently involved on any project with

	Yes	No	Don't know
Other National partner/s	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-European partners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

34. Is your department present on any board/committee/forum that fosters policy dialogue on higher education?

	Yes	No	Don't know
At National level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At European level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On a global level (Europe and beyond)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35. Are physiotherapy students from your department involved in policy dialogue on higher education?

	Yes	No	Don't know
At National level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At European level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On a global level (Europe and beyond)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**36. Does your department currently cooperate with other institutions on:**

	Yes	No	Don't know
Joint degrees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint programmes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 13. Mobility

The term 'mobility' makes reference to the effective involvement and free movement of students and teachers between different institutions, across different regions within a country and between different countries. In these subsequent questions, mobility refers to the physical movement of persons between institutions (sometimes as part of an exchange programme) for a determined period that contributes towards their study/work.

**37. Does your department have any formal agreements for the exchange of physiotherapy students and/or teachers?**

- ☐ Students
- ☐ Teachers
- ☐ Both students and teachers
- ☐ No agreements are currently held

**38. Do students have the possibility to engage in multiple exchanges throughout the duration of their studies?**

- ☐ Yes
- ☐ No

**39. During the last academic year, how many physiotherapy students from your department participated in an exchange?**

- |                              |                              |
|------------------------------|------------------------------|
| <input type="radio"/> <5%    | <input type="radio"/> 21-30% |
| <input type="radio"/> 6-10%  | <input type="radio"/> 31-40% |
| <input type="radio"/> 11-15% | <input type="radio"/> 41-50% |
| <input type="radio"/> 16-20% | <input type="radio"/> >50%   |

**40. On average, how long was the duration of each exchange?**

- |                                  |                                  |
|----------------------------------|----------------------------------|
| <input type="radio"/> <1 month   | <input type="radio"/> 5-6 months |
| <input type="radio"/> 1-2 months | <input type="radio"/> >6 months  |
| <input type="radio"/> 3-4 months |                                  |

**41. Does your department allow for your students to participate in exchanges only during a specific time period (mobility window)?**

- ☐ Yes
- ☐ No

Comments



**42. During the last academic year, how many physiotherapy students from other institutions were involved in an exchange within your department?**

- |                             |                             |
|-----------------------------|-----------------------------|
| <input type="radio"/> None  | <input type="radio"/> 31-40 |
| <input type="radio"/> 1-10  | <input type="radio"/> 41-50 |
| <input type="radio"/> 11-20 | <input type="radio"/> >50   |
| <input type="radio"/> 21-30 |                             |

**43. During the last academic year, how many physiotherapy teachers from your department were involved in a teaching exchange?**

- |                            |                                    |
|----------------------------|------------------------------------|
| <input type="radio"/> None | <input type="radio"/> 3-4%         |
| <input type="radio"/> <1%  | <input type="radio"/> 5 (or more)% |
| <input type="radio"/> 1-2% |                                    |

14. Mobility

44. Which of the following would influence your consideration for an exchange programme with a partner institution?

	Exchange strongly considered	Exchange may be considered	Exchange would not be considered
Education status is similar for both programmes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education status is higher in the partner programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education status is lower in the partner programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Language of instruction similar to home language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Language of instruction different to home language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Language of instruction also in English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Same course structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Different course structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Similar post-qualification professional practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Different post-qualification professional practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 15. Credit System

**45. What is the student work load of a full-time physiotherapy study programme for each year?**

- ☐ < 1500 hours
- ☐ 1500 hours to 1600 hours
- ☐ 1601 hours to 1700 hours
- ☐ 1701 hours to 1800 hours
- ☐ > 1800 hours

**46. Which of these learning activities are included in the calculation of student workload?**

- |                                                                   |                                                  |
|-------------------------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> Attending lectures                       | <input type="checkbox"/> Preparation of projects |
| <input type="checkbox"/> Attending seminars, tutorials, workshops | <input type="checkbox"/> Examinations            |
| <input type="checkbox"/> Independent and private study            | <input type="checkbox"/> Clinical placements     |

Other (please specify)

**47. Has your department implemented the European Credit Transfer and Accumulation System (ECTS)?**

- ☐ Yes
- ☐ No

13. European Credit Transfer and Accumulation System ECTS

48. In terms of student workload how many hours does 1 ECTS account for within your programme/s:

- ☐ 25 hours
- ☐ 26 hours
- ☐ 27 hours
- ☐ 28 hours
- ☐ 29 hours
- ☐ 30 hours
- ☐ Not sure

## 17. The Diploma Supplement

The Diploma Supplement (DS) is a document attached to a higher education diploma aiming at improving international 'transparency' and at facilitating the academic and professional recognition of qualifications (diplomas, degrees, certificates etc.) The Diploma Supplement is designed to provide a description of the nature, level, context, content and status of the studies that were successfully completed by the individual named on the original qualification to which the supplement is appended. It should be free from any value-judgements, equivalence statements or suggestions about recognition. It is a flexible non-prescriptive tool which is designed to save time, money and workload. It is capable of adaptation to local needs.

Further information may be downloaded from [http://ec.europa.eu/education/lifelong-learning-policy/doc1239\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc1239_en.htm)

### 49. Does your institution award a Diploma Supplement?

- ☐ Yes, however only on successful completion of studies
- ☐ Yes, even to students who do not successfully complete their studies
- ☐ No
- ☐ Don't know



13. Final Page

50. Thank you for answering the survey.  
Please leave any comments that you may wish to send.

## **Appendix 5**

### **The Survey Questionnaire to the Enphe Country Coordinators**

## 1. Survey Questionnaire - The Bologna Process and physiotherapy education in E...

Dear ENPHE country coordinator,

You are kindly asked to complete this questionnaire that is exploring the influence of the Bologna Process on physiotherapy study programmes across Europe.

This questionnaire forms an important part of a PhD research study. This covering letter is attached to the e-mail that you have received and from which you have accessed this survey. The e-mail also contains an attachment that serves as an annex to this survey, designed to assist you whilst answering the questions.

You have been identified as being a country coordinator on the European Network of Physiotherapy in Higher Education. All questions asked make reference to the physiotherapy governance in your country. This survey questionnaire shall be followed up by an interview of a randomised sample of country coordinators.

You may complete this questionnaire by clicking on the appropriate response buttons and where indicated you have the possibility to mark more than one choice of response. You may proceed from page to page by clicking the 'NEXT' button at the bottom of the screen, just below the progress bar that will indicate to you how far into the questionnaire you have arrived. You also have the option of going back through the pages by clicking on the 'PREV' button.

Before completing the questionnaire, please ensure that you have addressed all the questions. There is only one forced answer, that is the country tab. Once you complete the survey by clicking on the 'DONE' button at the end of the last page, you will not be able to correct or amend your responses. Should you wish to exit the survey at any time you may do this by clicking on 'Exit this survey' on the top right-hand corner of the page.

The time anticipated to complete the survey is about 15-20 minutes.

By completing this survey you will be contributing to increasing the knowledge on the influences of the Bologna Process in physiotherapy education. It is intended to submit the results for publication.

If you have any queries or questions please contact the researcher, e-mail: [john.xerri-decaro@um.edu.mt](mailto:john.xerri-decaro@um.edu.mt) or Phone: +356 9942 4404

Alternatively, you may contact the Director of Studies at Sheffield Hallam University, Ms. Maria Burton, e-mail - [M.Burton@shu.ac.uk](mailto:M.Burton@shu.ac.uk)

You may commence the survey by clicking the 'NEXT' button below.

Thank you.

John Xerri de Caro  
B.Sc. (Hons) Physiotherapy, M.Sc.  
ENPHE Focus Group Leader (Lifelong learning) and substitute coordinator for Malta  
PhD student at Sheffield Hallam University

## 2. The Bologna Process

**1. Are you aware of the Bologna Process?**

☐ Yes

☐ No

## 3. The Bologna Process

### 2. How do you rate your understanding on the Bologna Process?

- ☐ Very knowledgeable      ☐ Somewhat knowledgeable      ☐ Little knowledge      ☐ Not knowledgeable

### 3. How do you rate the importance of the Bologna Process for the organisation of the physiotherapy programmes in your country?

- ☐ Very important      ☐ Somewhat important      ☐ Little importance      ☐ Not important      ☐ Don't know

### 4. In your opinion, has the Bologna Process influenced any change in the organisation of the physiotherapy programmes in your country?

- ☐ Yes, to a large extent      ☐ Only slightly      ☐ No      ☐ Don't know



## 4. General questions

**\* 5. Country (Please click in box and select)**

**6. Which of the following higher education systems best describes the traditional developments in your country?**

- ☐ Personal Development Model
- ☐ Research Model (Humboldtian Model)
- ☐ Professional Training Model (Napoleonic Model)
- ☐ Don't know
- ☐ Other (please specify)

**7. What is the status of physiotherapy education within the national education system of your country? (check all that apply)**

- ☐ Higher Education
- ☐ Parallel system to Higher Education (same entry level as for Higher Education, but not officially considered)
- ☐ Professional/Vocational (entry level being lower than that for Higher Education)
- ☐ Other (please specify)

**8. Is physiotherapy education regulated on a national or on a regional level in your country?**

- ☐ National
- ☐ Regional
- ☐ Both
- ☐ Don't know

**9. Is there a specific law that regulates physiotherapy education?**

- ☐ Don't know
- ☐ No
- ☐ Yes

If yes, could you provide a link to this

**10. Which authority regulates physiotherapy education in your country?**

- ☐ Regulatory Body
- ☐ Professional Body
- ☐ Other (please specify)

**11. Which of the following give advice towards the rules and regulations for physiotherapy education in your country? (check all that apply)**

- ☐ Ministry responsible for Education
- ☐ Ministry responsible for Health
- ☐ Professional Body
- ☐ Regulatory Body
- ☐ None
- ☐ Don't know
- ☐ Other (please specify)

**12. Is there a national point of contact where all information related to higher education and physiotherapy may be reached?**

- ☐ Yes
- ☐ No
- ☐ Don't know

If yes, could you provide a link to this

## 5. The Bologna Process

**13. From the following list, could you indicate which exist as a national obligation (and hence is adopted by all physiotherapy schools by national consensus) or which exist on the basis of an institutional decision (and hence adopted only by certain institutions depending on their circumstances)?**

	National	Institutional	Does not exist	Don't know
Issue of a Diploma Supplement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A degree structure system based on three cycles (bachelor, master and doctoral)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
First cycle of studies (bachelor degree) lasting a minimum of three years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A first cycle of studies (bachelor degree) relevant to the European labour market as an appropriate level of qualification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European Credit Transfer and Accumulation System (ECTS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility of students allowing them access to study and training opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobility for teachers, researchers and administrative staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European co-operation in quality assurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adoption of the European Standards and Guidelines for quality assurance in higher education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion of a European dimension on Curriculum development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion of a European dimension on Inter-institutional co-operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion of a European dimension on Mobility schemes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion of a European dimension on Integrating programmes for study, training and research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provision for lifelong learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Involvement of the students in decision-making processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognition of joint degrees awarded in two or more European countries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adoption of a national qualifications framework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adoption of the European Qualifications Framework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adoption of learning outcomes and credits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognition of prior learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 6. Final Page

14. Thank you for answering the survey.

Please leave any comments that you may wish to send.

### Introduction Key Components

Thank you  
Present name  
Present purpose  
Confidentiality and anonymity  
Duration  
How interview will be conducted  
Opportunity for questions  
Consent

### Participant Introduction

How long have you been active in Enphe?  
What position do you hold within Enphe?  
How did you come to hold this position in Enphe?  
What are your main responsibilities?  
How many PT education institutions do you represent from (your country)?  
Do these institutions offer an overall picture of PT education in (your country)?  
Do you feel confident to talk about the general picture of PT education in (your country)?

### Topic prompts and guide

Significance of the Bologna Process to the participant  
The influence of the Bologna Process in the participants country  
Implementation and experience of the Bologna objectives  
Physiotherapy education in the participants country  
The Bologna Process and physiotherapy in Europe  
The Bologna Process in context – relevance of the Bologna Process  
Other influences

### Closing Key Components

Small summary  
Additional comments  
Next steps – release of information into study  
Thank you



## Introduction Key Components

Thank you for taking time to meet me today. I am John Xerri de Caro, a physiotherapist by profession, and also a member of Enphe. I am currently carrying out a research study as part of a PhD and this interview today is an important part of it. For the record, I am reading for a PhD at the Sheffield Hallam University, UK, and my area of inquiry is the Bologna Process and physiotherapy education across Europe. Specifically I am seeking to explore the influences of the Bologna Process on the governance of physiotherapy education as it has unfolded, whether or not it has had an influence and what changes may have occurred as a consequence.

The interview should take less than an hour. I shall be recording this session because I don't want to miss out on your comments. In this regard please be sure to speak up so that we do not miss any important comments.

Our conversation shall be kept strictly confidential. This interview may be discussed with my research supervisors and it is intended that the outcome shall be published. However, any information that shall be reported will not identify you personally as the respondent. You do not have to talk about anything you do not want to or feel uncomfortable talking about, and should you so wish, this interview may end at any time you prefer.

Initially I shall require some specific data pertaining to your involvement in Enphe, however from then on it will be an open discussion. I have jotted down some guides for me to ensure that we would have exhausted more or less the topic I wish to discuss, however this is only serving me to keep some structure that I may use to corroborate with other interviews once I have finished with my research.

Do you have any questions about what I have just explained?

I would like to remind you that if you have any queries that you wish to address about me or about the interview you may contact my Director of Studies at SHU. Her name is Maria Burton and I will be glad to provide you with her contact details.

I guess that your willingness to participate is an approval of your consent and so I think we should move forward with the interview.

## **Participant information**

Please talk to me about your involvement in Enphe.

## **Topic prompts and guide**

On to the Bologna Process, what are your thoughts or impressions about its significance or influence?

Significance of the Bologna Process to the participant

The influence of the Bologna Process in the participant's country

Implementation and experience of the Bologna objectives

Physiotherapy education in the participant's country

The Bologna Process and physiotherapy in Europe

The Bologna Process in context – relevance of the Bologna Process

Does the Bologna Process have an answer for important issues related to the governance of physiotherapy education?

Other influences on physiotherapy reform not necessarily linked to Bologna Process

## **Closing key components**

We seem to have exhausted the topic and there is always so much that one would have to say. Let us see if I am able to summarise in a few minutes what we have discussed today.

Is there anything more that you would like to add?

I shall be analysing the information that you and others gave me and I should be drawing up a report with the intention of finalising my research thesis and also publication. I'll be happy to send you a copy to review at that time, if you are interested.

Thank you once again for your time. Your acceptance to participate is greatly appreciated. I hope that it will serve to formulate a better picture about the influence of the Bologna Process on physiotherapy education in Europe.

## **Appendix 7**

The Survey Questionnaire to the Heads of Departments (French version)

# Questionnaire de l'enquête réalisée auprès des écoles de physiothérapie en Europe

## 1. Questionnaire de l'enquête – Le processus de Bologne et l'enseignement de la physiothérapie en E...

Madame/Monsieur le Responsable de Département,

Nous vous remercions de bien vouloir répondre à ce questionnaire qui analyse l'influence du processus de Bologne sur les programmes d'études en physiothérapie à travers l'Europe.

Ce questionnaire est à la base d'une partie d'un projet de recherche mené dans le cadre des exigences d'un travail de Doctorat. Une lettre d'accompagnement est jointe à l'e-mail que vous avez reçu et à partir duquel vous avez accédé à cette enquête.

Vous avez été identifié en qualité de Responsable/Coordonnateur du département de physiothérapie de votre établissement. Toutes les questions posées font référence aux programmes de physiothérapie proposés dans votre établissement.

Vous pouvez remplir ce questionnaire en cliquant sur les boutons de réponse appropriés et vous avez la possibilité, le cas échéant, de cocher plusieurs choix de réponse. Vous pouvez passer d'une page à l'autre en cliquant sur le bouton « NEXT » situé au bas de l'écran, juste en dessous de la barre de progression qui vous indiquera à quelle phase du questionnaire vous en êtes. Vous avez également la possibilité de revenir sur les pages précédentes en cliquant sur le bouton « PREV ».

Juste avant de terminer le questionnaire, veuillez vous assurer que vous avez répondu à toutes les questions. Une seule réponse est obligatoire, il s'agit de l'onglet pays. Après avoir validé l'enquête en cliquant sur le bouton « DONE » au bas de la dernière page, vous ne pourrez plus corriger ni modifier vos réponses. Si vous souhaitez quitter l'enquête à tout moment, vous pouvez le faire en cliquant sur « Exit this survey » dans l'angle supérieur droit de la page.

Le temps nécessaire estimé pour répondre à l'enquête est d'environ 15 à 30 minutes.

En remplissant ce questionnaire, vous contribuerez à accroître les connaissances quant aux influences du processus de Bologne sur l'enseignement de la physiothérapie. Cette enquête étant la première en son genre, les informations seront très précieuses à la communauté de physiothérapie. Les résultats devraient être publiés.

Votre participation est entièrement volontaire et aucun enregistrement permettant de vous identifier personnellement en tant que participant ne sera conservé. Toute référence aux réponses demeurera au niveau d'un pays et les pays seront regroupés dans la mesure du possible.

Pour toute demande ou question, veuillez contacter l'auteur de l'enquête par e-mail: john.xerri-decaro@um.edu.mt ou par téléphone : +356 9942 4404

Vous pouvez également contacter le Directeur des Etudes à la Sheffield Hallam University, Mme Maria Burton, e-mail - M.Burton@shu.ac.uk

Vous pouvez démarrer l'enquête en cliquant sur le bouton « NEXT » ci-dessous. Merci.

John Xerri de Caro

Licence (avec mention) en physiothérapie, Master en science.  
Etudiant en Doctorat à la Sheffield Hallam University

## 2. Le processus de Bologne

### 1. Connaissez-vous le processus de Bologne ?

Oui

Non



**3. Le processus de Bologne**

**2. Comment évaluez-vous votre compréhension du processus de Bologne ?**

Très bonne

Plutôt bonne

Réduite

Aucune

**3. Comment évaluez-vous l'importance du processus de Bologne pour l'organisation des programmes de physiothérapie dans votre département ?**

Très important

Assez important

Peu important

Pas important

**4. Le processus de Bologne a-t-il influencé des changements dans l'organisation des programmes de physiothérapie dans votre département ?**

Oui, largement

Peu

Non

Ne sait pas

#### 4. Questions d'ordre général

5. Pays \*

6. Votre département fait-il partie d'un établissement privé ou public ?

Etablissement privé

Etablissement public

Autre (veuillez préciser)

	5
	6

7. Quel est le statut de votre établissement au sein du système d'éducation national ?

Enseignement supérieur

Système parallèle à l'enseignement supérieur (même niveau d'entrée que pour l'enseignement supérieur, mais pas de reconnaissance officielle)

Enseignement professionnel/spécialisé (niveau d'entrée inférieur à celui de l'enseignement supérieur)

Autre (veuillez préciser)

8. Quelle affirmation décrit le « statu quo » de la physiothérapie au sein de votre établissement ?

La physiothérapie est le seul programme

La physiothérapie fait partie des programmes proposés

9. Votre établissement est-il membre du Réseau européen de l'enseignement supérieur en physiothérapie (ENPHE) ?

Oui

Non

## 5. Structure des diplômes et durée des programmes

Pour les besoins de ce questionnaire, les programmes diplômants doivent être compris comme suit :

Premier cycle - Niveau Licence ou Licence,  
Deuxième cycle - Niveau Maîtrise ou Maîtrise,  
Troisième cycle - Niveau Doctorat ou Doctorat

### 10. Lequel de ces diplômes de physiothérapeute votre département propose-t-il ? (plusieurs choix possibles)

Licence

Maîtrise

Doctorat

### 11. Pour chaque niveau, quelle est la durée du programme de physiothérapie (équivalent temps plein, années) ?

(Si votre département propose certains diplômes de physiothérapie d'une durée différente, veuillez les indiquer en cochant toutes les cases concernées.

N/A : sans objet - le diplôme n'est pas proposé)

N/A 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6

Licence

Maîtrise

Doctorat

Commentaire

### 12. Les résultats du cursus sont-ils précisés pour chacun des programmes suivants :

Oui

Non

Ne sait pas

Sans objet

Licence

Maîtrise

Doctorat

## 6. Cadre des certifications

Un cadre des certifications est avant tout un document officiel qui définit clairement chacune des certifications qu'il englobe. Il peut également fournir une hiérarchie des certifications. Du point de vue du système, il s'agit d'un modèle de méta-données constituant un cadre global permettant d'intégrer les certifications délivrées par différents organismes universitaires à l'intérieur d'une structure commune. Il se compose d'un ensemble de points de référence communs qui font référence aux résultats du cursus, soutenu par un ensemble d'outils et de techniques, indépendamment du système par lequel une certification particulière a été acquise.

Le Cadre Européen des Certifications (CEC) a été officiellement adopté par le Parlement européen et le Conseil en 2008 pour créer un système de traduction répertoriant les diplômes universitaires et autres certifications des différents Etats membres de l'UE. Il est conçu pour fournir une référence croisée des cadres nationaux de certifications.

### 13. A quel cadre de certifications votre établissement adhère-t-il ?

Ne sait pas

Cadre de certifications lié au CEC

Cadre de certifications différent du CEC

## 7. Assurance qualité

L'assurance qualité fait référence à un programme de surveillance et d'évaluation systématique des différents aspects d'un projet, d'un service ou d'une installation afin de s'assurer du respect des normes de qualité.

L'Association européenne pour l'assurance qualité dans l'enseignement supérieur (ENQA) a élaboré les European Standards and Guidelines for Quality Assurance (ESG, normes et lignes directrices européennes pour l'assurance qualité).

Plus d'informations sur l'AQ sur <http://www.enqa.eu/pubs.lasso>

### 14. Votre département se conforme-t-il aux European Standards and Guidelines for Quality Assurance (ESG) ?

- Oui
- Non
- Ne sait pas

### 15. Votre département applique-t-il des pratiques internes d'assurance qualité ?

- Oui
- Non
- Ne sait pas

### 16. Votre département applique-t-il des pratiques externes d'assurance qualité ?

- Oui
- Non
- Ne sait pas

### 17. Votre département publie-t-il des audits de qualité ?

- Oui
- Non
- Ne sait pas
- Sans objet (nous ne réalisons pas d'audits de qualité)

### 18. Les étudiants sont-ils impliqués dans l'évaluation de l'assurance qualité ?

- Oui
- Non
- Ne sait pas



## 8. Reconnaissance

**19. Une certification de niveau Licence (premier cycle) provenant de votre établissement permet-elle l'accès automatique au monde professionnel dans votre pays ?**

Oui, les diplômés peuvent commencer à pratiquer la physiothérapie immédiatement

Oui, mais les diplômés doivent s'inscrire auprès de l'autorité réglementaire compétente

Non, les diplômés du premier cycle doivent effectuer une période de stage en entreprise

Non, le niveau d'entrée dans la profession est supérieur à la Licence

Ne sait pas

**20. L'accès au niveau Maîtrise (second cycle) au sein de votre établissement est-il automatique après la certification de niveau Licence (premier cycle) ?**

Oui

Non

	5
	6

## 9. Dimensions sociales

**21. Combien d'années de scolarité obligatoire officielle (à l'exclusion du jardin d'enfants) sont-elles nécessaires pour que les étudiants puissent accéder à un programme de physiothérapie de premier cycle (niveau Licence) dans votre établissement ?**

<12	14
12	15
13	>15

**22. Quels sont les frais de scolarité approximatifs pour un programme de physiothérapie de premier cycle (niveau Licence) dans votre établissement ?**

< € 1000	> € 10000
€ 1000 - € 5000	Gratuité de l'enseignement
€ 5000 - € 7500	Les étudiants reçoivent une bourse d'étude
€ 7500 - € 10000	

**23. Votre établissement propose-t-il un nombre limité d'inscriptions au premier cycle (niveau Licence) du programme de physiothérapie?**

Non, les inscriptions sont illimitées

Oui, le nombre d'étudiants admis est de

**24. A chaque niveau, des filières d'apprentissage flexibles sont-elles offertes aux étudiants (études à temps partiel ou congés de formation par exemple)**

Oui	Non	Sans objet
-----	-----	------------

Niveau Licence

Niveau Maîtrise

Niveau Doctorat

Commentaires

## Questionnaire de l'enquête réalisée auprès des écoles de physiothérapie en Europe

**25. Les candidats au Doctorat à temps plein ont-ils la possibilité d'être employés par votre établissement en tant que chercheurs débutants (bénéficiant ainsi d'un salaire et de prestations sociales) ?**

Oui

Non

Ne sait pas

Sans objet

## 10. Employabilité

**26. Combien d'heures (minimum requis) les étudiants en physiothérapie consacrent-ils à la pratique clinique durant le premier cycle (niveau Licence) ?**

0 heure	1001 - 1200 heures
1 - 500 heures	1201 - 1500 heures
500 - 750 heures	> 1500 heures
751 - 1000 heures	

**27. A la fin de leur scolarité, les étudiants en physiothérapie reçoivent-ils**

Oui, officiellement	La plupart du temps	Parfois	Non	Ne sait pas
------------------------	------------------------	---------	-----	-------------

Des informations sur les problématiques liées à l'emploi

Des conseils et des orientations sur les opportunités d'emploi

**28. Après avoir réussi leur scolarité, dans quel secteur la majorité des diplômés de votre département trouvent-ils un emploi ?**

Secteur public

Privé

Industrie

Ne sait pas

Autre (veuillez préciser)

**11. Apprentissage tout au long de la vie (ALV)**

**29. Votre département organise-t-il des activités ALV (formation continue, développement professionnel continu) en physiothérapie ?**

Oui

Non

Ne sait pas

**30. Des partenariats officiels pour l'ALV en physiothérapie existent-ils avec**

Oui

Non

Ne sait pas

Les pouvoirs publics

Les établissements d'enseignement supérieur

Les établissements d'enseignement ne faisant pas partie de l'enseignement supérieur

Les organisations professionnelles



## 12. Dimension mondiale

La dimension mondiale fait référence aux interactions existant, dans l'enseignement supérieur, entre les établissements (et donc leurs étudiants, enseignants et administrateurs) d'autres pays en Europe et en dehors de l'Europe.

L'Union européenne comprend les 27 États membres suivants :

Autriche, Belgique, Bulgarie, Chypre, République tchèque, Danemark, Estonie, Finlande, France, Allemagne, Grèce, Hongrie, Irlande, Italie, Lettonie, Lituanie, Luxembourg, Malte, Pays-Bas, Pologne, Portugal, Roumanie, République slovaque, Slovénie, Espagne, Suède, Royaume-Uni

### 31. L'année dernière, votre département a-t-il inscrit des étudiants en physiothérapie, autres que des « étudiants autochtones », originaires de

Oui	Non	Ne sait pas
-----	-----	-------------

pays de l'UE

pays hors UE

pays hors Europe

### 32. Votre département emploie-t-il des enseignants en physiothérapie originaires d'autres pays ?

Oui	Non	Ne sait pas
-----	-----	-------------

En Europe

Hors Europe

### 33. Votre département participe-t-il actuellement à un projet avec

Oui	Non	Ne sait pas
-----	-----	-------------

Un/des partenaire/s nationaux

Des partenaires européens

Des partenaires hors Europe

### 34. Votre département participe-t-il à un conseil / comité / forum qui encourage le dialogue politique sur l'enseignement supérieur ?

Oui	Non	Ne sait pas
-----	-----	-------------

Au niveau national

Au niveau européen

Au niveau mondial (Europe et au-delà)

### 35. Les étudiants en physiothérapie de votre département participent-ils au dialogue politique sur l'enseignement supérieur ?

Oui	Non	Ne sait pas
-----	-----	-------------

Au niveau national

Au niveau européen

Au niveau mondial (Europe et au-delà)

**36. Votre département est-il actuellement en collaboration avec d'autres établissements sur :**

Oui	Non	Ne sait pas
-----	-----	-------------

Des diplômes communs

Des programmes communs

### 13. Mobilité

Le terme « Mobilité » fait référence à la participation effective et à la libre circulation des étudiants et des enseignants entre différents établissements, différentes régions d'un même pays et différents pays. Dans les questions posées ci-dessous, la mobilité fait référence à la circulation physique des personnes entre établissements (parfois dans le cadre d'un programme d'échange) pour une période définie, qui participe à leur apprentissage/travail.

**37. Votre département a-t-il des accords officiels relatifs à l'échange entre étudiants et/ou enseignants en physiothérapie ?**

Etudiants  
Enseignants  
Etudiants et enseignants  
Aucun accord actuellement en place

**38. Les étudiants ont-ils la possibilité de participer à de multiples échanges pendant la durée de leurs études ?**

Oui  
Non

**39. Au cours de la dernière année universitaire, combien d'étudiants en physiothérapie dans votre département ont-ils participé à un échange ?**

<5%	21-30%
6-10%	31-40%
11-15%	41-50%
16-20%	>50%

**40. En moyenne, quelle a été la durée de chaque échange ?**

<1 mois	5-6 mois
1-2 mois	>6 mois
3-4 mois	

**41. Votre département permet-il à vos étudiants de participer à des échanges uniquement pendant une période donnée (fenêtre de mobilité) ?**

Oui  
Non  
Commentaires

**42. Au cours de la dernière année universitaire, combien d'étudiants en physiothérapie d'autres établissements ont-ils participé à un échange avec votre département ?**

Aucun	31-40
1-10	41-50
11-20	>50
21-30	

**43. Au cours de la dernière année universitaire, combien d'enseignants en physiothérapie de votre département ont-ils participé à un échange ?**

Aucun	3-4%
<1 %	5 (ou plus)%
1-2%	

## 14. Mobilité

**44. Lequel des énoncés suivants influencerait-il vos intentions quant à un programme d'échange avec un établissement partenaire ?**

Echange sérieusement  
envisagé

Echange envisageable

Echange non envisageable

L'état de l'enseignement est  
similaire pour les deux  
programmes

L'état de l'enseignement est plus élevé  
dans le programme partenaire

L'état de l'enseignement est moins  
élevé dans le programme partenaire

La langue d'enseignement est la même

La langue d'enseignement est différente

La langue d'enseignement est aussi l'anglais

Même structure de cours

Structure de cours différente

Pratique professionnelle post-  
certification similaire

Pratique professionnelle post-  
certification différente



## 15. Système de crédit

**45. Quelle est la charge de travail de l'étudiant participant à un programme d'études en physiothérapie à temps plein pour chaque année ?**

- < 1500 heures
- 1500 heures à 1600 heures
- 1601 heures à 1700 heures
- 1701 heures à 1800 heures
- > 1800 heures

**46. Lesquelles de ces activités d'apprentissage entrent-elles dans le calcul de la charge de travail de l'étudiant ?**

- |                                                        |                        |
|--------------------------------------------------------|------------------------|
| Assister à des conférences                             | Préparation de projets |
| Participer à des séminaires, travaux dirigés, ateliers | Examens                |
| Etude indépendante et privée                           | Stages cliniques       |

Autre (veuillez préciser)

**47. Votre département a-t-il mis en œuvre le système européen de transfert et d'accumulation de crédits (ECTS) ?**

- Oui
- Non

**16. Système européen de transfert et d'accumulation de crédits ECTS**

**48. En termes de charge de travail pour l'étudiant, combien d'heures représente 1 ECTS dans votre/vos programme/s :**

25 heures

29 heures

26 heures

30 heures

27 heures

Difficile à évaluer

28 heures

## 17. Le Supplément au diplôme

Le Supplément au diplôme (SD) est un document joint à un diplôme de l'enseignement supérieur visant à améliorer la « transparence » internationale et à faciliter la reconnaissance universitaire et professionnelle des certifications (diplômes, acquis universitaires, certificats, etc.) Le Supplément au diplôme est conçu pour fournir une description de la nature, du niveau, du contexte, du contenu et du cursus accompli avec succès par la personne désignée sur la certification originale à laquelle le supplément est annexé. Il doit être dépourvu de tout jugement de valeur, de toute déclaration d'équivalence ou suggestion de reconnaissance. C'est un outil souple non normatif, destiné à économiser du temps, de l'argent et du travail. Il est en mesure de s'adapter aux besoins locaux.

Des renseignements complémentaires peuvent être téléchargés sur [http://ec.europa.eu/education/lifelong-learning-policy/doc1239\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc1239_en.htm)

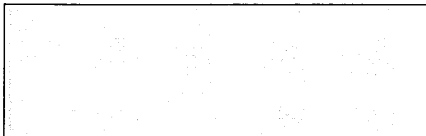
### 49. Votre établissement délivre-t-il un Supplément au diplôme ?

- Oui, mais uniquement en cas de scolarité réussie
- Oui, même à des étudiants qui ne réussissent pas leurs études
- Non
- Ne sait pas

13. Page finale

**50. Merci d'avoir répondu à cette enquête.**

**Indiquez les commentaires que vous souhaitez nous adresser.**



## **Appendix 8**

The Survey Questionnaire to the Heads of Departments (German version)



## 1. Der Bologna-Prozess und physiotherapeutische Ausbildung an Hochschulen in Europa

Sehr geehrte Vorsitzende/ Sehr geehrter Vorsitzender,

Wir möchten Sie dazu einladen, an dieser Umfrage bezüglich der Einflussnahme des Bologna-Prozesses auf physiotherapeutische Studiengänge und Lehrpläne in Europa teilzunehmen, indem Sie folgenden Fragebogen ausfüllen.

Die Ergebnisse dieser Umfrage bilden die Grundlage für einen Teil eines Forschungsprojektes zur Erlangung des Dokortitels (PhD). Anbei finden Sie auch ein Anschreiben zu der E-Mail, welche Sie von uns erhalten haben, um auf diesen Fragebogen zuzugreifen.

Sie wurden als Fachbereichsvorsitzender einer Hochschule im Lehrbereich der Physiotherapie ermittelt. Alle Fragen beziehen sich auf physiotherapeutische Studien- bzw. Lehrpläne Ihrer Hochschule.

Bitte füllen Sie diesen Fragebogen aus, indem Sie auf die entsprechenden Antwortfelder klicken. Einige Fragen (entsprechend angegeben) lassen mehrere Antworten zu. Durch Klicken auf "WEITER" im unteren Bereich des Bildschirms, gelangen Sie auf die nächste Seite. Die Statusleiste, ebenfalls im unteren Bereich des Bildschirms, zeigt an, auf welcher Seite Sie sich gerade befinden. Sie haben auch die Möglichkeit rückwärts zu blättern, indem Sie auf "ZURÜCK" klicken.

Bitte prüfen Sie vor Beendigung des Fragebogens, ob Sie alle Fragen beantwortet haben. Jedoch nur die Frage nach Ihrem Land muss beantwortet werden. Sobald Sie alle Fragen beantwortet haben, klicken Sie auf "FERTIG" im unteren Bereich der letzten Seite. Bitte beachten Sie, dass Sie danach keine Änderungen mehr vornehmen können. Sie können die Umfrage während der Eingabe jederzeit abbrechen. Klicken Sie dazu einfach auf die Schaltfläche "FRAGEBOGEN VERLASSEN" im oberen rechten Bereich des Bildschirms.

Sie werden ca. 15-30 Minuten benötigen, um den Fragebogen vollständig auszufüllen.

Durch Ihre Teilnahme an dieser Umfrage ermöglichen Sie uns, mehr über die Einflussnahme des Bologna-Prozesses auf physiotherapeutische Ausbildungseinrichtungen zu erfahren. Da dies die erste Umfrage zu diesem Thema ist, liefern die Ergebnisse wertvolle Daten im Bereich der Physiotherapie. Die Ergebnisse dieser Umfrage werden veröffentlicht.

Ihre Teilnahme ist freiwillig. Es werden keine Daten, welche Sie als Teilnehmer identifizieren könnten, gespeichert. Lediglich Länderangaben werden gespeichert und in verschiedene Ländergruppen eingeteilt.

Bei Fragen oder Anmerkungen wenden Sie sich bitte per E-Mail an [john.xerri-decaro@um.edu.mt](mailto:john.xerri-decaro@um.edu.mt) oder per Telefon unter +356 9942 4404

oder direkt an Frau Maria Burton, Studiendirektorin an der Sheffield Hallam University, per E-Mail an [M.Burton@shu.ac.uk](mailto:M.Burton@shu.ac.uk).

Beginnen Sie mit der Beantwortung des Fragebogens, indem Sie auf "WEITER" klicken.

Vielen Dank für Ihre Mühe.

John Xerri de Caro  
B.Sc.(Hons) Physiotherapy, M.Sc.  
Doktorand an der Sheffield Hallam University

## 2. Der Bologna-Prozess

**Sind Sie mit dem Bologna-Prozess betraut?**

Ja  
Nein

### 3. Der Bologna-Prozess

#### 2. Wie gut kennen Sie sich mit dem Bologna-Prozess aus?

Sehr gut

Ein bisschen

Wenig

Gar nicht

#### 3. Wie groß schätzen Sie die Bedeutung des Bologna-Prozesses für den Aufbau des Studien- bzw. Lehrplans Ihres Fachbereiches ein?

Sehr wichtig

Wichtig

Weniger wichtig

Nicht wichtig

#### 4. Wurden aufgrund des Bologna-Prozesses Änderungen an Studien- bzw. Lehrplänen vorgenommen?

Ja, es wurden sehr viele Änderungen vorgenommen.

Ja. Es wurden jedoch nur wenige Änderungen vorgenommen.

Nein

Unbekannt

#### 4. Allgemeine Fragen

##### 5. Land

##### 6. Ist Ihre Ausbildungsstätte eine private oder öffentliche Einrichtung?

Private Einrichtung  
Öffentliche Einrichtung  
Sonstiges (bitte angeben)

##### 7. Bitte geben Sie den Bildungsstatus Ihrer Einrichtung im nationalen Ausbildungssystem an:

Hochschulausbildung  
Vergleichbar mit der Hochschulausbildung (gleiche Zulassungsvoraussetzungen jedoch keine öffentliche Einrichtung)  
Berufsausbildung (geringere Zulassungsvoraussetzungen im Vgl. zu denen der Hochschulausbildung)  
Sonstiges (bitte angeben)

##### 8. Welche der folgenden Aussagen beschreibt den Studien- bzw. Lehrbereich Ihrer Einrichtung am ehesten?

Unsere Einrichtung bietet nur den Lehrbereich Physiotherapie an.  
Unsere Einrichtung bietet neben der Physiotherapie noch andere Lehrbereiche an.

##### 9. Ist Ihre Einrichtung Mitglied im *European Network of Physiotherapy in Higher Education* (ENPHE)?

Ja  
Nein

5. Aufbau und Dauer des Studiengangs bzw. Lehrplans

Im Rahmen dieser Erhebung werden Studienabschlüsse wie folgt definiert:

- 1. Studienzyklus - Bachelor oder vergleichbarer Abschluss
- 2. Studienzyklus - Master oder vergleichbarer Abschluss
- 3. Studienzyklus - Promotion oder vergleichbarer Abschluss

10. Welche dieser Abschlüsse bietet Ihre Einrichtung an (mehrere Angaben möglich)?

Bachelorabschluss  
Masterabschluss  
Promotion

11. Bitte geben Sie die Dauer des Studien- bzw. Lehrplanes für den jeweiligen Studienabschluss an (Angabe für ein Vollzeitstudium in Jahren):

[Falls Ihr Fachbereich separate Studiengänge (mit anderer Studiendauer) anbietet, kreuzen Sie bitte alle entsprechenden Kästchen an. Trifft nicht zu: Abschluss wird nicht angeboten]

Trifft nicht zu.   1   1.5   2   2.5   3   3.5   4   4.5   5   5.5   6

Bachelorabschluss

Masterabschluss

Promotion

Bemerkung

12. Werden die Lernergebnisse der einzelnen Studiengänge genau festgelegt?

Ja   Nein   Unbekannt   Trifft nicht zu

Bachelorabschluss

Masterabschluss

Promotion



## 6. Qualifikationsrahmen

Der Qualifikationsrahmen legt die jeweiligen Qualifikationen zur Erlangung der entsprechenden Studienabschlüsse genau fest und zeigt die einzelnen Qualifikationen hierarchisch auf. Dieses Meta-Daten-Modell umfasst Qualifikationen verschiedener akademischer Einrichtungen, welche systematisch in einer Struktur zusammenfassend dargestellt werden. Der Qualifikationsrahmen bezieht sich auf Lernergebnisse und angewendete Hilfsmittel und Methoden unabhängig vom jeweiligen System, in dem eine Qualifikation erworben wird.

Im Jahre 2008 verabschiedeten das Europaparlament sowie der Europarat den Europäischen Qualifikationsrahmen (EQF), um so die verschiedenen akademischen Studienabschlüsse der EU-Staaten zu harmonisieren und um einen Beitrag zur internationalen Transparenz der verschiedenen Qualifikationsrahmen zu leisten.

### 13. An welchen Qualifikationsrahmen richtet sich Ihre Einrichtung?

Unbekannt

Qualifikationsrahmen der EQF

Anderer Qualifikationsrahmen

## 7. Qualitätssicherung

Die Qualitätssicherung ist eine Maßnahme zur systematischen Überprüfung und Bewertung verschiedener Aspekte von Projekten, Dienstleistungen und Einrichtungen bezüglich der Einhaltung von Qualitätsstandards. Die *European Association for Quality Assurance in Higher Education* (ENQA) entwickelte die Europäischen Standards und Leitlinien für Qualitätssicherung (ESG, European Standards and Guidelines).

Mehr Informationen zu diesem Thema erhalten Sie unter <http://www.enqa.eu/pubs.lasso>

### 14. Richtet sich Ihr Fachbereich an die Europäischen Standards und Leitlinien für Qualitätssicherung?

Ja  
Nein  
Unbekannt

### 15. Führt Ihr Fachbereich interne Qualitätssicherungsmaßnahmen durch?

Ja  
Nein  
Unbekannt

### 16. Führt Ihr Fachbereich externe Qualitätssicherungsmaßnahmen durch?

Ja  
Nein  
Unbekannt

### 17. Veröffentlicht Ihr Fachbereich die Ergebnisse der Qualitätsaudits?

Ja  
Nein  
Unbekannt  
Triff nicht zu (es werden keine Qualitätsrevisionen durchgeführt).

### 18. Sind Studenten an der Evaluierung von Qualitätssicherungsmaßnahmen beteiligt?

Ja  
Nein  
Unbekannt

## 8. Akkreditierung

### 19. Ist der Bachelorabschlusses (1. Studienzyklus) Ihrer Einrichtung ein berufsqualifizierender Abschluss in Ihrem Land?

Ja. Absolventen können sofort ihren Beruf als Physiotherapeut ausüben.

Ja. Absolventen müssen sich jedoch bei den zuständigen Behörden und Verbänden eintragen lassen.

Nein. Absolventen des ersten Studienzyklus' müssen zuerst ein Praktikum machen.

Nein. Der Bachelorabschlusses ist nicht berufsqualifizierend.

Unbekannt.

### 20. Reicht die Absolvierung des Bachelors (erster Studienzyklus) an Ihrer Einrichtung automatisch aus, um das Masterstudium (zweiter Studienzyklus) zu beginnen?

Ja

Nein

9. Soziale Perspektive

21. Wie viele Schuljahre sind mindestens nötig, um sich für einen Bachelorstudiengang (erster Studienzyklus) an Ihrer Einrichtung einschreiben zu können?

<12	14
12	15
13	>15

22. Wie hoch ist die Studiengebühr für einen Bachelorstudiengang (erster Studienzyklus) an Ihrer Einrichtung?

< €1.000	> €10.000
€1.000 - €5.000	Keine Studiengebühr
€5.000 - €7.500	Studenten erhalten ein Stipendium, um am Studium teilzunehmen.
€7.500 - €10.000	

23. Ist die Studentenzahl für den Bachelorstudiengang (erster Studienzyklus) Physiotherapie begrenzt?

- Nein, keine Begrenzung.
- Ja, die Studentenzahl ist begrenzt auf

24. Werden allen Studenten unabhängig vom Studienzyklus flexible Studienprogramme (z. B. Teilzeitstudium oder Studienpausen) angeboten?

	Ja	Nein	Trifft nicht zu.
Bachelorphase			
Masterphase			
Promotionsphase			
Bemerkungen			

**25. Haben Vollzeitdoktoranten die Möglichkeit, bei Ihrer Einrichtung als Nachwuchswissenschaftler angestellt zu werden (und erhalten ein Gehalt und sind sozial- und rentenversichert)?**

Ja

Nein

Unbekannt

Trifft nicht zu

Ja



## 10. Beschäftigungsmöglichkeiten

### 26. Wie viele Stunden (mindestens) müssen Studenten im Bachelorstudiengang (erster Studienzyklus) in klinischen Einrichtungen arbeiten?

0 Stunden	1001 - 1200 Stunden
1 - 500 Stunden	1201 - 1500 Stunden
500 - 750 Stunden	> 1500 Stunden.
751 - 1000 Stunden	

### 27. Am Ende des Studienganges wird den Studenten angeboten

Offiziell ja      Sehr Oft      Manchmal      Nein      Unbekannt

Information zu Beschäftigungsverhältnissen

Beratung und Betreuung bei Beschäftigungsmöglichkeiten

### 28. In welchen Gebieten bzw. Einrichtungen findet die Mehrheit Ihrer Absolventen eine Anstellung?

Öffentlicher Dienst

Private Einrichtungen

Industrie

Unbekannt

Sonstiges (bitte angeben)

## 11. Lebenslanges Lernen (LLL)

**29. Führt Ihr Fachbereich LLL-Maßnahmen (z. B. akademische Weiterbildung, berufliche Weiterentwicklung) im Bereich Physiotherapie durch?**

Ja  
Nein  
Unbekannt

**30. Arbeiten Sie mit anderen Einrichtungen zur Durchführung von LLL-Maßnahmen zusammen?**

	Ja	Nein	Unbekannt
Behörden			
Hochschulen			
Schulen und Berufsschulen			
Berufsverbände			

## 12. Globale Perspektive

Die globale Perspektive umfasst das Zusammenspiel von Hochschulen (inkl. Studenten/Dozenten und Verwaltungsangestellten) verschiedener Länder innerhalb und außerhalb Europas.

Die Europäische Union hat 27 Mitglieder:

Österreich, Belgien, Bulgarien, Zypern, Tschechien, Dänemark, Estland, Finnland, Frankreich, Deutschland, Griechenland, Ungarn, Irland, Italien, Lettland, Litauen, Luxemburg, Malta, die Niederlande, Polen, Portugal, Rumänien, Slowakei, Slowenien, Spanien, Schweden, Vereinigtes Königreich.

### 31. Haben außer nationalen Studenten ebenfalls Studenten anderer Länder am Studiengang Physiotherapie im vergangenen Jahr teilgenommen?

Ja                      Nein                      Unbekannt.

EU-Staaten

Nicht-EU-Staaten

Staaten außerhalb Europas

### 23. Stellt Ihr Fachbereich Dozenten anderer Länder ein?

Ja                      Nein                      Unbekannt.

Dozenten aus Europa

Dozenten aus Nicht-Europäischen Ländern

### 33. Ist Ihr Fachbereich an einem Projekt mit anderen Partnern beteiligt?

Ja                      Nein                      Unbekannt.

Nationale Partner

Europäische Partner

Nicht-europäische Partner

### 34. Nimmt Ihr Fachbereich an Ausschüssen /Komitees /Foren, welche den Dialog zwischen Hochschulen fördern, teil?

Ja                      Nein                      Unbekannt

auf nationaler Ebene

auf europäischer Ebene

auf globaler Ebene (Europa und weitere Länder)

### 35. Nehmen Physiotherapie-Studenten Ihres Fachbereiches am politischen Dialog im Hochschulbereich teil?

Ja                      Nein                      Unbekannt

auf nationaler Ebene

auf nationaler Ebene

auf globaler Ebene (Europa und weitere Länder)

**36. Kooperiert Ihr Fachbereich derzeit mit anderen  
Institutionen in den folgenden Bereichen?**

	Ja	Nein	Unbekannt.
Gemeinsame Studienabschlüsse			
Gemeinsame Studiengänge			

## 13. Mobilität

Der Begriff "Mobilität" beschreibt die effektive Einflussnahme und den freien Austausch von Studenten und Dozenten von verschiedenen Einrichtungen in verschiedenen Ländern und Regionen mit denen anderer Länder und Regionen. In den folgenden Fragen wird Mobilität als physischer Austausch zwischen Einrichtungen (auch im Rahmen eines Austauschprogrammes) innerhalb eines bestimmten Zeitraums zur Förderung/Ergänzung ihres Studiums oder ihrer Forschungsarbeit verstanden.

### 37. Gibt es Vereinbarungen, welche den Studenten- bzw. Dozenten-Austausch im Bereich der Physiotherapie festlegen?

- Studentenvereinbarungen
- Dozentenvereinbarungen
- Studenten- und Dozentenvereinbarungen
- Es gibt keine Studenten- oder Dozentenvereinbarungen

### 38. Können Studenten an mehreren Austauschprogrammen während ihres Studiums teilnehmen?

- Ja
- Nein

### 39. Wie viele Physiotherapie-Studenten Ihres Fachbereiches haben im letzten Jahr an einem Austausch teilgenommen?

- |        |        |
|--------|--------|
| <5%    | 21-30% |
| 6-10%  | 31-40% |
| 11-15% | 41-50% |
| 16-20% | >50%   |

### 40. Wie viele Monate im Durchschnitt dauerte ein Austausch?

- |            |            |
|------------|------------|
| <1 Monat   | 5-6 Monate |
| 1-2 Monate | >6 Monate  |
| 3-4 Monate |            |

### 41. Dürfen Studenten Ihres Fachbereiches nur für einen bestimmten Zeitraum (Mobilitätsfenster) an einem Austausch teilnehmen?

- Ja
- Nein

Bemerkungen



**42. Wie viele Physiotherapie-Studenten anderer Fachbereiche haben im letzten akademischen Jahr in Ihrem Fachbereich an einem Austausch teilgenommen?**

Keine	31-40
1-10	41-50
11-20	>50
21-30	

Jn

**43. Wie viele Physiotherapie-Dozenten Ihres Fachbereiches haben im letzten akademischen Jahr an einem Austausch teilgenommen?**

Keine	3-4%
<1%	>5%
1-2%	

Jn

14. Mobilität

**44. Welche der folgenden Aussagen würde Ihre Meinung über einen Austausch mit einer Partnerhochschule am ehesten beeinflussen?**

Der Austausch mit einer  
anderen Partnerhochschule  
ist sehr erwünscht

Der Austausch mit einer  
anderen  
Partnerhochschule ist  
erwünscht.

Der Austausch mit einer  
anderen  
Partnerhochschule ist  
nicht erwünscht.

Die Lernergebnisse der  
Austauschprogramme beider Hochschulen  
ist ähnlich.

Die Lernergebnisse des  
Austauschprogrammes der  
Partnerhochschule sind besser

Die Lernergebnisse des  
Austauschprogrammes der  
Partnerhochschule sind schlechter.

Die Unterrichtssprache der  
Partnerhochschule ist die gleiche.

Die Unterrichtssprache der  
Partnerhochschule ist eine andere.

Die Unterrichtssprache der  
Partnerhochschule ist eine andere.

Englisch ist ebenfalls Unterrichtssprache.

Die Kursstruktur der Partnerhochschulen ist  
gleich

Die Kursstrukturen der Partnerhochschulen  
sind verschieden.

Die Nachqualifizierungen für die  
Berufspraxis sind ähnlich.

Die Nachqualifizierungen für die  
Berufspraxis sind verschieden.

**15. Punkte-System**

**45. Wie hoch ist der allgemeine Studienaufwand von Vollzeitstudenten im Physiotherapiestudium pro Jahr?**

- < 1500 Stunden
- 1500 Stunden bis 1600 Stunden
- 1601 Stunden bis 1700 Stunden
- 1701 Stunden bis 1800 Stunden
- > 1800 Stunden

JM

**46. Welche der folgenden Studienaktivitäten waren in obiger Berechnung mit inbegriffen?**

- |                                                 |                                                 |
|-------------------------------------------------|-------------------------------------------------|
| Teilnahme an Vorlesungen                        | Projektvorbereitungen                           |
| Teilnahme an Seminaren, Tutorien und Workshops. | Prüfungen                                       |
| Selbststudium                                   | Berufspraktikum in einer klinischen Einrichtung |

Sonstiges (bitte angeben)

**47. Wurden in Ihrem Fachbereich die ECTS (Europäisches System zur Übertragung und Akkumulierung von Leistungspunkten) eingeführt?**

- Ja
- Nein

**13. Europäisches System zur Übertragung und Akkumulierung von Leistungspunkten (ECTS)**

**48. Wie viele Stunden Studienaufwand entspricht 1 ECTS innerhalb des Physiotherapiestudiums?**

25 Stunden  
26 Stunden  
27 Stunden  
28 Stunden

30 Stunden  
29 Stunden  
Unbekannt

## 17. Das Diploma Supplement

Das *Diploma Supplement* (DS) ist eine standardisierte Erläuterung zu Abschlusszeugnissen im Hochschulbereich, welche sowohl die internationale Transparenz als auch die akademische und berufliche Anerkennung von Abschlüssen verschiedenster Qualifikationen (Diplom, Zertifikat usw.) fördern und erleichtern soll. Das *Diploma Supplement* erläutert Zweck, Niveau, Zusammenhang und Status des erfolgreich abgeschlossenen Studiums und wird dem Abschlusszeugnis des jeweiligen Studenten angefügt. Es sollte objektiv sein und bezüglich der Akkreditierung von Abschlüssen keinen Vergleich zu anderen Abschlüssen ziehen oder suggerieren. Das *Diploma Supplement* ist ein flexibles Beschreibungs-Tool, das Zeit, Geld und Arbeitsaufwand spart. Zudem kann es an die verschiedenen lokalen Bedürfnisse angepasst werden.

Mehr Informationen zu diesem Thema erhalten Sie unter [http://ec.europa.eu/education/lifelong-learning-policy/doc1239\\_de.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc1239_de.htm)

### 49. Stellt Ihre Hochschule Diploma Supplements aus?

Ja, jedoch nur bei erfolgreich abgeschlossenem Studium.

Ja, auch bei Abbruch des Studiums.

Nein.

Unbekannt.



50. Vielen Dank für Ihre Teilnahme an der Umfrage.

Fragen und Anmerkungen Ihrerseits können Sie gerne hier eingeben.

## **Appendix 9**

The Survey Questionnaire to the Heads of Departments (Italian version)

# 1. Questionario – Il Processo di Bologna e la formazione in fisioterapia in Europa

Gentile Direttore di Dipartimento,

Le chiediamo gentilmente di completare il presente questionario relativo all'influenza del Processo di Bologna sui corsi di studi di fisioterapia in Europa.

Il presente questionario funge da punto di partenza per un progetto di ricerca in corso per l'ottenimento di un PhD (Dottorato di ricerca). Allegata all'e-mail da Lei ricevuta, da cui può accedere al questionario, vi è una lettera di presentazione.

Lei ci è stato indicato quale Direttore/Coordinatore del Dipartimento di Fisioterapia del suo istituto. Tutte le domande si riferiscono ai corsi di fisioterapia offerti dal Suo istituto.

È possibile compilare il questionario cliccando sui relativi pulsanti di risposta e, dove indicato, ha la facoltà di effettuare più di una scelta per risposta. Per passare da una pagina all'altra è necessario cliccare sul tasto 'NEXT' in fondo allo schermo, appena sotto la barra di stato che indica la situazione di completamento del questionario. È inoltre possibile tornare alle pagine precedenti cliccando sul pulsante 'PREV'.

Prima di concludere il questionario, si assicuri di avere risposto a tutte le domande. Vi è solo una risposta obbligatoria, ossia il campo del paese. Dopo aver completato il questionario cliccando sul pulsante 'DONE' alla fine dell'ultima pagina, non sarà possibile correggere o modificare le risposte. Qualora desiderasse uscire dal questionario in un qualsiasi momento, può cliccare su 'Esci dal questionario' nell'angolo in alto a destra della pagina.

Il tempo previsto per la compilazione del questionario è di circa 15-30 minuti.

Compilando il presente questionario, contribuirà a aumentare la conoscenza dell'influenza del Processo di Bologna sulla formazione in fisioterapia. Essendo il primo questionario di questo tipo, le informazioni saranno estremamente utili alla comunità fisioterapica. È nostra intenzione pubblicarne i risultati.

La sua partecipazione è completamente volontaria e non verrà conservato nessun dato che possa identificarla personalmente in qualità di intervistato. Ogni riferimento alle risposte sarà solamente su base nazionale e ove possibile i paesi verranno raggruppati.

Per qualsiasi domanda, la preghiamo di contattare il ricercatore scrivendo a [john.xerri-decaro@um.edu.mt](mailto:john.xerri-decaro@um.edu.mt) o telefonando al numero +356 9942 4404.

In alternativa, può contattare il Direttore della Didattica della Sheffield Hallam University, Ms. Maria Burton, e-mail - [M.Burton@shu.ac.uk](mailto:M.Burton@shu.ac.uk)

Può iniziare il questionario cliccando sul tasto 'NEXT' sotto.

La ringrazio.

John Xerri de Caro  
B.Sc. (Hons) Physiotherapy, M.Sc.  
Studente di dottorato (PhD) presso la Sheffield Hallam University

**2. Il Processo di Bologna**

**1. È a conoscenza del Processo di Bologna?**

☐ Sì

☐ No

## 3. Il Processo di Bologna

### 2. Come valuta la Sua conoscenza riguardo al Processo di Bologna?

- ☐ Ben informato      ☐ Abbastanza informato      ☐ Poco informato      ☐ Non informato

### 3. Come valuta l'importanza del Processo di Bologna per l'organizzazione dei corsi di fisioterapia nel Suo dipartimento?

- ☐ Molto importante      ☐ Abbastanza importante      ☐ Poco importante      ☐ Non importante

### 4. Il Processo di Bologna ha prodotto qualche cambiamento nell'organizzazione dei corsi di fisioterapia nel Suo dipartimento?

- ☐ Sì, in buona in parte      ☐ Solo in parte      ☐ No      ☐ Non so



## 4. Domande generali

### \* 5. Paese

### 6. Il Suo dipartimento appartiene a un istituto pubblico o privato?

- ☐ Istituto privato
- ☐ Istituto pubblico
- ☐ Altro (specificare)

### 7. Qual è il ruolo del Suo istituto nell'ambito del sistema d'istruzione nazionale?

- ☐ Istruzione superiore
- ☐ Sistema equivalente all'Istruzione Superiore (livello dell'Istruzione Superiore, ma non ufficialmente riconosciuto)
- ☐ Formazione professionale (livello inferiore rispetto all'Istruzione Superiore)
- ☐ Altro (specificare)

### 8. Quale affermazione descrive lo "status quo" della fisioterapia all'interno del Suo istituto?

- ☐ La fisioterapia è l'unico corso
- ☐ La fisioterapia è uno dei corsi offerti.

### 9. Il Suo istituto è membro dell'European Network of Physiotherapy in Higher Education (ENPHE)?

- ☐ Sì
- ☐ No

## 3. Struttura e durata dei corsi di laurea

Ai fini del presente questionario, i corsi di laurea devono essere intesi come segue:

1° ciclo - Laurea di primo livello

2° ciclo - Laurea di secondo livello

3° ciclo - Dottorato

**10. Quali dei seguenti corsi di laurea per fisioterapisti sono offerti dal Suo dipartimento? (selezionare tutte le opzioni valide)**

☐ Laurea di primo livello

☐ Laurea di secondo livello

☐ Dottorato

**11. Per ogni livello, qual è la durata del corso di fisioterapia (equivalente al tempo pieno, in anni)?**

**(se il suo dipartimento offre corsi di fisioterapia di diversa durata, lo segnali spuntando le relative caselle. N/A: non applicabile o il corso non è offerto)**

	N/A	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Laurea di primo livello												
Laurea di secondo livello												
Dottorato												
Commenti												

**12. I risultati d'apprendimento sono specificati per ognuno dei seguenti corsi offerti?**

	Sì	No	Non so	Non applicabile
Laurea di primo livello	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laurea di secondo livello	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dottorato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 6. Quadro delle qualifiche

Il Quadro delle qualifiche è innanzitutto un documento ufficiale che definisce chiaramente ogni titolo in esso indicato. Può anche fornire una gerarchia dei titoli. In system view è un modello meta-dati costituito da un quadro che raggruppa tutti i titoli rilasciati dai diversi istituti accademici e li riunisce in una struttura comune. È formato da una serie di punti di riferimento comuni relativi ai risultati d'apprendimento e corredato da una gamma di strumenti e tecniche, indipendentemente dal sistema in cui quel dato titolo è stato acquisito.

L'European Qualifications Framework (EQF – Quadro Europeo delle Qualifiche) è stato formalmente approvato dal Parlamento Europeo e dal Consiglio nel 2008 al fine di creare uno strumento comparativo di riferimento per i titoli accademici e altre qualifiche tra gli stati dell'UE. È stato ideato per permettere l'equiparazione tra i quadri nazionali delle qualifiche.

### 13. A quale quadro delle qualifiche aderisce il suo istituto?

- ☐ Non so
- ☐ Quadro delle qualificazioni collegato all'EQF
- ☐ Quadro delle qualificazioni diverso dall'EQF

## 7. Garanzia di qualità

La garanzia di qualità consiste in un programma di monitoraggio e valutazione sistematici dei vari aspetti di un progetto, servizio o struttura per assicurare il rispetto degli standard di qualità.

L'European Association for Quality Assurance in Higher Education (ENQA – Associazione europea per la garanzia della qualità nell'istruzione superiore) ha sviluppato gli European Standards and Guidelines for Quality Assurance (ESG – Standard e linee guida europei per la garanzia della qualità).

Ulteriori informazioni sulla Garanzia di qualità sono disponibili su <http://www.enqa.eu/pubs.lasso>

### 14. Il Suo dipartimento segue gli European Standards and Guidelines for Quality Assurance (ESG)

- ☐ Sì
- ☐ No
- ☐ Non so

### 15. Il Suo dipartimento adotta pratiche interne di garanzia della qualità?

- ☐ Sì
- ☐ No
- ☐ Non so

### 16. Il Suo dipartimento adotta pratiche esterne di garanzia della qualità?

- ☐ Sì
- ☐ No
- ☐ Non so

### 17. Il Suo dipartimento pubblica controlli sulla qualità?

- ☐ Sì
- ☐ No
- ☐ Non so
- ☐ Non applicabile (non svolgiamo controlli sulla qualità)
- ☐ Non so

### 18. Gli studenti sono coinvolti nella valutazione della garanzia di qualità?

- ☐ Sì
- ☐ No
- ☐ Non so

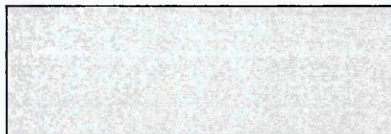
## 8. Riconoscimento

**19. Una laurea di primo livello (1° ciclo) presso il Suo istituto permette l'accesso automatico alla professione nel suo paese?**

- ☐ Sì, i laureati possono iniziare immediatamente a praticare la fisioterapia
- ☐ Sì, ma i laureati devono iscriversi all'autorità di regolamentazione competente
- ☐ No, i laureati dei corsi di primo ciclo devono svolgere un periodo di tirocinio
- ☐ No, l'ammissione alla professione richiede un livello superiore rispetto alla laurea di primo grado
- ☐ Non so

**20. Nel Suo istituto l'ammissione alla laurea di secondo livello (2° ciclo) è automatica a seguito di una laurea di primo livello (1° ciclo)?**

- ☐ Sì
- ☐ No





## 9. Dimensione sociale

**21. Quanti anni di istruzione obbligatoria (esclusa la scuola dell'infanzia) sono richiesti agli studenti che iniziano il corso di laurea di primo livello in fisioterapia presso il Suo istituto?**

- |                              |                              |
|------------------------------|------------------------------|
| <input type="checkbox"/> <12 | <input type="checkbox"/> 14  |
| <input type="checkbox"/> 12  | <input type="checkbox"/> 15  |
| <input type="checkbox"/> 13  | <input type="checkbox"/> >15 |

**22. A quanto ammontano approssimativamente le tasse d'iscrizione per un corso di laurea di primo livello in fisioterapia presso il Suo istituto?**

- |                                             |                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------|
| <input type="checkbox"/> < € 1.000          | <input type="checkbox"/> > € 10.000                                        |
| <input type="checkbox"/> € 1.000 - € 5.000  | <input type="checkbox"/> Iscrizione gratuita                               |
| <input type="checkbox"/> € 5.000 - € 7.500  | <input type="checkbox"/> Gli studenti percepiscono un assegno di frequenza |
| <input type="checkbox"/> € 7.500 - € 10.000 |                                                                            |

**23. Il Suo istituto stabilisce un numero chiuso d'ammissione al corso di laurea di primo livello in fisioterapia?**

- ☐ No, non vi è numero chiuso
- ☐ Sì, il numero di studenti ammessi è...

**24. Per ogni livello, agli studenti vengono offerti percorsi di apprendimento flessibili (quale studio part-time o sospensione degli studi)**

	Sì	No	Non applicabile
Laurea di primo livello	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laurea di secondo livello	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dottorato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commenti			

**25. I candidati al dottorato a tempo pieno hanno la possibilità di essere assunti dal Suo istituto in qualità di ricercatori in formazione (quindi percependo uno stipendio e i contributi pensionistici)?**

- ☐ Sì
- ☐ No
- ☐ Non so
- ☐ Non applicabile

## 10. Occupabilità

**26. Quante ore (requisito minimo) dedicano gli studenti di fisioterapia alla pratica clinica durante il corso di laurea di primo livello?**

- |                                         |                                          |
|-----------------------------------------|------------------------------------------|
| <input type="checkbox"/> 0 ore          | <input type="checkbox"/> 1001 - 1200 ore |
| <input type="checkbox"/> 1 - 500 ore    | <input type="checkbox"/> 1201 - 1500 ore |
| <input type="checkbox"/> 500 - 750 ore  | <input type="checkbox"/> > 1500 ore      |
| <input type="checkbox"/> 751 - 1000 ore |                                          |

**27. Al termine del periodo di studi, agli studenti di fisioterapia vengono forniti**

	Si, a livello ufficiale	Molto spesso	A volte	No	Non so

Informazioni relative al lavoro

Consigli e indicazioni sulle opportunità di lavoro

**28. A seguito del completamento degli studi, dove trova impiego la maggioranza degli studenti laureati presso il Suo dipartimento?**

- ☐ Strutture pubbliche
- ☐ Studi privati
- ☐ Aziende
- ☐ Non so
- ☐ Altro (specificare)

**11. Formazione permanente (LLL – Lifelong Learning)**

**29. Il suo dipartimento organizza attività di formazione permanente (formazione continua, sviluppo professionale continuo) in fisioterapia?**

- ☐ Sì
- ☐ No
- ☐ Non so

**30. Esistono accordi di formazione continua in fisioterapia con**

	Si	No	Non so
Enti pubblici			
Istituti di istruzione superiore			
Istituti di istruzione di livello inferiore rispetto all'istruzione superiore			
Organizzazioni professionali			

## 12. La dimensione globale

La dimensione globale riguarda l'interazione tra istituti di istruzione superiore (quindi tra studenti/docenti e amministratori) di altri paesi sia all'interno che all'esterno dell'Europa.

L'Unione Europea è formata da 27 stati membri:

Austria, Belgio, Bulgaria, Cipro, Repubblica Ceca, Danimarca, Estonia, Finlandia, Francia, Germania, Grecia, Ungheria, Irlanda, Italia, Lettonia, Lituania, Lussemburgo, Malta, Paesi Bassi, Polonia, Portogallo, Romania, Repubblica Slovacca, Slovenia, Spagna, Svezia, Regno Unito

### 31. Durante l'ultimo anno, oltre a quelli del suo paese nel Suo dipartimento si sono iscritti studenti di fisioterapia provenienti da

	Si	No	Non so
Stati UE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stati non UE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stati extra-europei	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 32. Il Suo dipartimento assume docenti di fisioterapia provenienti da altri paesi?

	Si	No	Non so
Dall'Europa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Da fuori Europa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 33. Il Suo dipartimento partecipa attualmente a qualche progetto con

	Si	No	Non so
Altri partner nazionali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partner europei	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partner extra-europei	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 34. Il Suo dipartimento è presente all'interno di qualche commissione/comitato/forum che promuova il dialogo istituzionale sull'istruzione superiore?

	Si	No	Non so
A livello nazionale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A livello europeo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A livello mondiale (Europa e oltre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 35. Gli studenti di fisioterapia del suo dipartimento partecipano al dialogo istituzionale sull'istruzione superiore?

	Si	No	Non so
A livello nazionale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A livello europeo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A livello mondiale (Europa e oltre)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**36. Il suo dipartimento attualmente collabora con altri istituti per:**

	Sì	No	Non so
Lauree congiunte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Programmi congiunti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 13. Mobilità

Il termine "mobilità" si riferisce al reale coinvolgimento e la libera circolazione di studenti e docenti tra diversi istituti, attraverso diverse regioni di uno stesso paese o tra paesi diversi. Nelle seguenti domande, la mobilità si riferisce al movimento fisico di persone tra istituti (a volte quale parte di un programma di scambio) per un periodo determinato che contribuisce al loro studio/lavoro.

### 37. Il Suo dipartimento ha stipulato accordi formali per lo scambio di studenti e/o docenti di fisioterapia?

- ☐ Studenti
- ☐ Docenti
- ☐ Entrambi
- ☐ Nessun accordo attualmente attivo

### 38. Gli studenti hanno la possibilità di partecipare a più scambi nell'arco del loro percorso di studio?

- ☐ Sì
- ☐ No

### 39. Durante l'ultimo anno accademico, quanti studenti di fisioterapia del Suo dipartimento hanno partecipato a uno scambio?

- |                                 |                                 |
|---------------------------------|---------------------------------|
| <input type="checkbox"/> <5%    | <input type="checkbox"/> 21-30% |
| <input type="checkbox"/> 6-10%  | <input type="checkbox"/> 31-40% |
| <input type="checkbox"/> 11-15% | <input type="checkbox"/> 41-50% |
| <input type="checkbox"/> 16-20% | <input type="checkbox"/> >50%   |

### 40. Qual è la durata media di ogni scambio?

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> <1 mese  | <input type="checkbox"/> 5-6 mesi |
| <input type="checkbox"/> 1-2 mesi | <input type="checkbox"/> >6 mesi  |
| <input type="checkbox"/> 3-4 mesi |                                   |

### 41. Il suo dipartimento permette agli studenti di partecipare a scambi solo durante un periodo stabilito (finestra di mobilità)?

- ☐ Yes
- ☐ No

Commenti

**42. Durante l'ultimo anno accademico, quanti studenti di  
fisioterapia di altri istituti hanno partecipato a uno scambio  
all'interno del Suo istituto?**

- |                                  |                                |
|----------------------------------|--------------------------------|
| <input type="checkbox"/> Nessuno | <input type="checkbox"/> 31-40 |
| <input type="checkbox"/> 1-10    | <input type="checkbox"/> 41-50 |
| <input type="checkbox"/> 11-20   | <input type="checkbox"/> >50   |
| <input type="checkbox"/> 21-30   |                                |

**43. Durante l'ultimo anno accademico, quanti studenti di  
fisioterapia del Suo dipartimento hanno partecipato a uno scambio  
didattico?**

- |                                  |                                        |
|----------------------------------|----------------------------------------|
| <input type="checkbox"/> Nessuno | <input type="checkbox"/> 3-4%          |
| <input type="checkbox"/> <1%     | <input type="checkbox"/> 5 (o di più)% |
| <input type="checkbox"/> 1-2%    |                                        |

### 44. Quale delle seguenti informazioni influenzerebbe la Sua scelta di un programma di scambio con un istituto partner?

	Scambio fortemente considerato	Lo scambio può essere considerato	Scambio non considerato
Il livello accademico è simile per entrambi gli istituti			
Il livello accademico è superiore presso l'istituto partner			
Il livello accademico è inferiore presso l'istituto partner			
La lingua d'insegnamento è simile alla lingua usata nel mio istituto			
La lingua d'insegnamento è diversa dalla lingua usata nel mio istituto			
La lingua d'insegnamento è anche l'inglese			
Stessa struttura dei corsi			
Diversa struttura dei corsi			
Simile pratica professionale post-laurea			
Diversa pratica professionale post-laurea			

## 15. Sistemi dei crediti

**45. Qual è il carico di lavoro di uno studente di fisioterapia a tempo pieno per ogni anno?**

- ☐ < 1500 ore
- ☐ da 1500 a 1600 ore
- ☐ da 1601 a 1700 ore
- ☐ da 1701 a 1800 ore
- ☐ > 1800 ore

**46. Quali delle seguenti attività sono incluse nel calcolo del carico di lavoro degli studenti?**

- ☐ Frequenza alle lezioni
- ☐ Preparazione di progetti
- ☐ Frequenza a seminari, corsi, gruppi di lavoro
- ☐ Esami
- ☐ Studio indipendente e privato
- ☐ Tirocini presso cliniche
- ☐ Altro (specificare)

**47. Il Suo dipartimento ha adottato il Sistema europeo di trasferimento e accumulazione dei crediti (ECTS)?**

- ☐ Sì
- ☐ No





**16. Sistema europeo di trasferimento e accumulazione dei crediti (ECTS)**

**48. In termini di carico di lavoro degli studenti, a quante ore corrisponde 1 ECTS nel/i suo/i corso/i?**

☐ 25 ore

☐ 29 ore

☐ 26 ore

☐ 30 ore

☐ 27 ore

☐ Non sicuro

☐ 28 ore

## 17. Il Diploma Supplement

Il Diploma Supplement (DS) è un documento allegato al diploma di istruzione superiore volto a migliorare la "trasparenza" internazionale e semplici fare il riconoscimento accademico e professionale delle qualifiche (diplomi, lauree, certificati ecc.). Il Diploma Supplement è ideato per fornire una descrizione della natura, livello, contesto e stato degli studi conclusi brillantemente dalla persona indicata sulla qualifica originale a cui è allegato il DS. Non deve contenere giudizi di valore, dichiarazioni di equipollenza o riferimenti al riconoscimento. È uno strumento flessibile non prescrittivo volto a risparmiare tempo, denaro e lavoro. Può essere adattato alle esigenze locali.

Ulteriori informazioni sono reperibili su [http://ec.europa.eu/education/lifelong-learning-policy/doc1239\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc1239_en.htm)

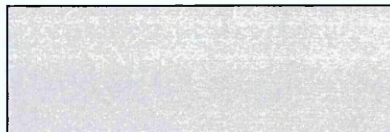
### 49. Il suo istituto rilascia il Diploma Supplement?

- ☐ Sì, ma solo agli studenti che hanno completato gli studi
- ☐ Sì, anche agli studenti che non hanno completato gli studi
- ☐ No
- ☐ Non so

**18. Pagina finale**

**50. Grazie per aver risposto al questionario.**

**La preghiamo di scrivere eventuali commenti.**

A rectangular box with a light gray background and a thin black border, intended for the respondent to write any additional comments.

## **Appendix 10**

The Survey Questionnaire to the Heads of Departments (Spanish version)



# Cuestionario encuesta para facultades de fisioterapia en Europa

## 1. Cuestionario encuesta sobre el Proceso de Bolonia y la formación en fisioterapia en E...

Estimado Jefe de Departamento:

Le pedimos amablemente que cumplimente este cuestionario que explora la influencia del Proceso de Bolonia en los programas de estudio de fisioterapia en Europa.

Este cuestionario constituye la base de parte de un proyecto de investigación que se está realizando con el fin de alcanzar los requisitos que conducen a la consecución del grado de Doctor. Se adjunta una carta de presentación al correo electrónico que ha recibido y desde el cual usted tendrá acceso a esta encuesta.

Usted ha sido identificado como Jefe / Coordinador del Departamento de Fisioterapia de su Facultad. Todas las cuestiones expuestas hacen referencia a los programas de fisioterapia que se imparten en su Facultad.

Puede cumplimentar este cuestionario haciendo clic en los botones de la respuesta apropiada y, en aquéllos lugares donde se indica, tiene la posibilidad de marcar más de una elección en su respuesta. Puede pasar de página haciendo clic en el botón "NEXT (SIGUIENTE)" situado en la parte inferior de la pantalla, justo debajo de la barra de progreso que indica hasta dónde ha llegado en el cuestionario. Asimismo tiene la opción de volver atrás hacia páginas ya contestadas haciendo clic en el botón "PREV (ANTERIOR)".

Antes de cumplimentar el cuestionario, rogamos se asegure que ha contestado todas las preguntas. Sólo existe una respuesta obligatoria, que es la pestaña del país. Una vez que haya completado la encuesta, si hace clic en el botón "DONE (HECHO)" situado al final de la última página, no podrá corregir o modificar las respuestas. En caso de que desee abandonar la encuesta en cualquier momento, puede hacerlo haciendo clic en "Exit this survey (Salir de la encuesta)" situado en la esquina superior derecha de la página.

El tiempo estimado en cumplimentar la encuesta es de unos 15-30 minutos.

Cumplimentando esta encuesta usted estará contribuyendo a aumentar el conocimiento de las influencias de Proceso de Bolonia en los estudios de fisioterapia. Tratándose de la primera encuesta de esta naturaleza, la información resultará muy valiosa para la comunidad fisioterapéutica. Se pretende remitir los resultados de la publicación.

Su participación es totalmente voluntaria y no se guardará ningún tipo de registro que le identifique personalmente como personal participante. Cualquier referencia a las respuestas permanecerá en el país y siempre que sea posible se agruparán por países.

Si tiene cualquier duda o pregunta, rogamos se ponga en contacto con el investigador a través de la dirección de correo electrónico: [john.xerri-decaro@um.edu.mt](mailto:john.xerri-decaro@um.edu.mt) o por teléfono en el número: +356 9942 4404

Como alternativa, puede ponerse en contacto con el Jefe de Estudios de Sheffield Hallam University, Ms. Maria Burton, en la dirección de correo electrónico - [M.Burton@shu.ac.uk](mailto:M.Burton@shu.ac.uk)

Puede dar comienzo a la encuesta haciendo clic en el botón "NEXT

(SIGUIENTE)" que aparece debajo.

Muchas gracias.

John Xerri de Caro  
B.Sc.(Hons) Physiotherapy, M.Sc.  
Estudiante de Doctorado en Sheffield Hallam University

## 1. El proceso de Bolonia

1. ¿Tiene conocimiento del Proceso de Bolonia?

☐ Sí

☐ No

## 2. ¿Cómo califica su comprensión del Proceso de Bolonia?

☐ Muy informado

☐ Algo informado

☐ Poco informado

☐ Nada informado

## 3. ¿Cómo califica la importancia del proceso de Bolonia para la organización de los programas de fisioterapia en su departamento?

☐ Muy importante

☐ Bastante importante

☐ Poco importante

☐ Nada importante

## 4. ¿Ha supuesto el Proceso de Bolonia algún cambio en la organización de los programas de fisioterapia de su departamento?

☐ Sí, en gran medida

☐ Sólo ligeramente

☐ No

☐ No lo sé

## 4. Preguntas generales

### \* 5. País

### 6. ¿Forma parte su departamento de una institución pública o privada?

☐ Institución privada

☐ Institución pública

☐ Otra (por favor, especifique)

### 7. ¿Cuál es el status de su institución dentro del sistema educativo de su país?

☐ Educación superior

☐ Sistema paralelo a la Educación Superior (mismo nivel de entrada que la Educación Superior, aunque no considerado como tal oficialmente)

☐ Formación profesional (nivel de entrada inferior al de la Educación Superior)

☐ Otros (por favor, especifique)

### 8. ¿Qué afirmación describe el "status quo" de fisioterapia dentro de su institución?

☐ Fisioterapia es el único programa

☐ Fisioterapia es uno de los programas ofertados

### 9. ¿Es su institución miembro de la Red Europea de Fisioterapia en la Educación Superior (ENPHE, por sus siglas en inglés)?

☐ Sí

☐ No

## 5. Estructura del grado y duración de los programas

Para la finalidad de este cuestionario, se debe entender que los programas de grado hacen referencia a lo siguiente:

1er ciclo – Nivel de grado o Grado,

2º ciclo – Nivel de master o Master,

3er ciclo – Nivel de doctorado o grado de Doctor

### 10. ¿Cuál de los siguientes grados oferta su departamento para fisioterapeutas? (seleccione aquéllos que sean de aplicación)

Grado

Master

Grado de doctor

### 11. En cada nivel, ¿cuál es la duración del programa de fisioterapia (equivalente a tiempo completo en número de años)?

(En caso de que su departamento ofrezca grados de fisioterapia separados con una duración diferente, rogamos lo indique marcando las casillas apropiadas. N/A: no aplicable o no se oferta dicho grado)

	N/A	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
Grado												
Master												
Grado de doctor												
Comentario												

### 12. ¿Se especifican los resultados del aprendizaje en cada uno de los siguientes programas ofertados?

	Sí	No	No lo sé	No aplicable
Grado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Master	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grado de doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## 6. Marco de cualificaciones

Un Marco de cualificaciones es principalmente un documento oficial que define con claridad cada cualificación sometida al mismo. Asimismo puede ofrecer una jerarquía de cualificaciones. A la vista del sistema se trata de un modelo de metadatos que consiste en un marco global que tiene por objeto integrar los títulos emitidos por las diferentes instituciones académicas en una estructura común. Consta de un conjunto de puntos comunes de referencia que hacen referencia a los resultados del aprendizaje, apoyado por una amplia gama de herramientas y técnicas independientes del sistema donde se obtuvo una cualificación particular.

El Marco de cualificaciones europeo (EQF, por sus siglas en inglés) fue adoptado formalmente por el Parlamento Europeo y el Consejo de Europa en 2008 con el objetivo de crear un instrumento de conversión para referenciar los grados académicos y otras cualificaciones educativas entre los estados miembros de la UE. Está diseñado para permitir que se interrelacionen los marcos de cualificación nacionales.

### 13. ¿A qué marco de cualificación se adhiere su institución?



No lo sé



Marco de cualificaciones vinculado al EQF



Marco de cualificaciones diferente del EQF

## 9. Dimensiones sociales

**21. ¿Cuántos años de educación formal obligatoria (excluyendo la guardería) necesitan haber realizado los estudiantes para entrar en el 1er ciclo (nivel de grado) del programa de fisioterapia en su institución?**

☐ <12

☐ 14

☐ 12

☐ 15

☐ 13

☐ >15

**22. ¿Cuánto se abona de matrícula en el 1er ciclo (nivel de grado) del programa de fisioterapia en su institución?**

☐ < €0,000

☐ > €0,000

☐ €0,000 - €5,000

☐ Educación gratuita

☐ €5,000 - €7,500

☐ Los estudiantes abonan un estipendio para participar

☐ €7,500 - €10,000

**23. ¿Tiene su institución un número limitado de matrículas al 1er ciclo (nivel de grado) del programa de fisioterapia?**

☐ No, la matrícula es libre

☐ Sí, el número de estudiantes es limitado

**24. En cada nivel, ¿se ofrece a los estudiantes itinerarios formativos flexibles (como, por ejemplo, estudio a tiempo parcial, o periodos de descanso)?**

	Sí	No	No aplicable
Nivel de grado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nivel de master	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nivel de doctorado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comentarios

**25. ¿Se les brinda a los estudiantes de doctorado a tiempo completo la oportunidad de obtener un empleo en su institución como investigadores en prácticas (beneficiándose gracias a ello de un salario y de seguridad social / cotizaciones a ésta)?**

☐ Sí

☐ No

☐ No lo sé

☐ No aplicable

## 10. Empleabilidad

**26. ¿Cuántas horas (requisito mínimo) disponen los estudiantes de fisioterapia de prácticas clínicas en todo el 1er ciclo (nivel de grado)?**

- |                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| <input type="checkbox"/> 0 horas          | <input type="checkbox"/> 1001 - 1200 horas |
| <input type="checkbox"/> 1 - 500 horas    | <input type="checkbox"/> 1201 - 1500 horas |
| <input type="checkbox"/> 500 - 750 horas  | <input type="checkbox"/> > 1500 horas      |
| <input type="checkbox"/> 751 - 1000 horas |                                            |

**27. Al final de sus estudios, ¿se ofrece a los estudiantes de fisioterapia**

	Oficialmente Sí	Muy a menu do	A veces	No	No lo sé
información sobre temas relacionados con el empleo?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
asesoramiento sobre oportunidades laborales?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**28. Tras la finalización con éxito de los estudios, ¿dónde encuentran trabajo la mayoría de los titulados de su departamento?**

- ☐ Entidades públicas
- ☐ Práctica privada
- ☐ Industria
- ☐ No lo sé

Otros (por favor, especifique)

**11. Formación permanente (LLL por sus siglas en inglés)**

**29. ¿Organiza su departamento actividades de LLL (como formación continua, desarrollo profesional continuo) en fisioterapia?**

☐ Sí

☐ No

☐ No lo sé

**30. ¿Existen convenios formales de LLL en fisioterapia con**

	Sí	No	No lo sé
entidades públicas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
instituciones de educación superior?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
instituciones formativas que no están en el nivel de educación superior?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
organizaciones profesionales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## 12. Dimensión global

La dimensión global hace referencia a las interacciones entre instituciones en educación superior (es decir, sus estudiantes / profesores y administración) de otros países europeos y de fuera de Europa.

La Unión Europea incluye los 27 estados miembros:

Austria, Bélgica, Bulgaria, Chipre, República Checa, Dinamarca, Estonia, Finlandia, Francia, Alemania, Grecia, Hungría, Irlanda, Italia, Letonia, Lituania, Luxemburgo, Malta, Holanda, Polonia, Portugal, Rumanía, Eslovaquia, Eslovenia, España, Suecia, Reino Unido

### 31. Durante el año pasado, ¿se matricularon en su departamento estudiantes de fisioterapia, exceptuando "estudiantes nacionales" cuya nacionalidad era de

	Sí	No	No lo sé
países de la UE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
países fuera de la UE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
países no europeos	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### 32. ¿Contrata su departamento profesorado de fisioterapia procedente de otros países?

	Sí	No	No lo sé
De Europa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
De fuera de Europa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### 33. ¿Se encuentra en la actualidad su departamento implicado en algún proyecto con

	Sí	No	No lo sé
otros socios nacionales?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
socios europeos?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
socios no europeos?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### 34. ¿Está presente su departamento en algún consejo / comité / foro que fomente el diálogo sobre políticas de educación superior?

	Sí	No	No lo sé
A nivel nacional	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A nivel europeo	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A nivel global (Europa y fuera de Europa)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### 35. ¿Se encuentran implicados los estudiantes de fisioterapia de su departamento en diálogos sobre políticas de educación superior?

	Sí	No	No lo sé
A nivel nacional	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A nivel europeo	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A nivel global (Europa y fuera de Europa)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## 36. ¿Coopera en la actualidad su departamento con otras instituciones en:

	Sí	No	No lo sé
grados conjuntos?	<i>I'</i>	<i>I'</i>	<i>I'</i>
programas conjuntos ?	<i>I'</i>	<i>I'</i>	<i>I'</i>

## 13. Movilidad

El término "movilidad" hace referencia a la implicación efectiva y a la libre circulación de estudiantes y profesores entre instituciones diferentes, en regiones diferentes dentro de un país y entre países diferentes. En las siguientes preguntas, movilidad hace referencia al movimiento físico de personas entre instituciones (a veces como parte de un programa de intercambio) durante un periodo determinado de tiempo que contribuye a su estudio / trabajo.

### 37. ¿Tiene su departamento acuerdos formales para el intercambio de estudiantes y profesorado de fisioterapia?

- ☐ Estudiantes
- ☐ Profesorado
- ☐ Tanto estudiantes como profesorado
- ☐ No existen acuerdos en la actualidad

### 38. ¿Se les brinda a los estudiantes la posibilidad de implicarse en múltiples intercambios durante toda la duración de sus estudios?

- ☐ Sí
- ☐ No

### 39. Durante el último año académico, ¿cuántos estudiantes de fisioterapia de su departamento han participado en un intercambio?

- |                                 |                                 |
|---------------------------------|---------------------------------|
| <input type="checkbox"/> <5%    | <input type="checkbox"/> 21-30% |
| <input type="checkbox"/> 6-10%  | <input type="checkbox"/> 31-40% |
| <input type="checkbox"/> 11-15% | <input type="checkbox"/> 41-50% |
| <input type="checkbox"/> 16-20% | <input type="checkbox"/> >50%   |

### 40. De media, ¿cuánto dura cada intercambio?

- |                                    |                                    |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> <1 mes    | <input type="checkbox"/> 5-6 meses |
| <input type="checkbox"/> 1-2 meses | <input type="checkbox"/> >6 meses  |
| <input type="checkbox"/> 3-4 meses |                                    |

### 41. ¿Permite su departamento participar a estudiantes en intercambios solo durante un periodo de tiempo especificado (ventana de movilidad)?

- ☐ Sí
- ☐ No

Comentarios

**42. Durante el último año académico, ¿cuántos estudiantes de fisioterapia procedentes de otras instituciones estuvieron participando en un intercambio en su departamento?**

☐ Ninguno

☐ 31-40

☐ 1-10

☐ 41-50

☐ 11-20

☐ >50

☐ 21-30

**43. Durante el último año académico, ¿cuántos profesores de fisioterapia de su departamento estuvieron participando en un intercambio de profesorado?**

☐ Ninguno

☐ 3-4%

☐ <1%

☐ 5 % (o más)

☐ 1-2%

## 14. Movilidad

**44. ¿Cuál de las siguientes afirmaciones influiría en el estudio por su departamento de un programa de intercambio con una institución asociada?**

	Se consideraría el intercambio	Se podría considerar el intercambio	No se consideraría el intercambio
El nivel de formación es similar en ambos programas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
El nivel de formación es superior en el programa asociado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
El nivel de formación es inferior en el programa asociado	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
El idioma de impartición es similar al idioma materno	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
El idioma de impartición es diferente al idioma materno	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
El idioma de impartición es el inglés	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Misma estructura del curso	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diferente estructura del curso	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Práctica profesional post-cualificación similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Práctica profesional post-cualificación diferente	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## 15. Sistema de créditos

**45. ¿Cuál es la carga lectiva anual para un estudiante del programa de estudios de fisioterapia a tiempo completo?**

- ☐ < 1500 horas
- ☐ 1500 horas a 1600 horas
- ☐ 1601 horas a 1700 horas
- ☐ 1701 horas a 1800 horas
- ☐ > 1800 horas

**46. ¿Cuál de las siguientes actividades formativas se incluyen en el cálculo de la carga lectiva del estudiante?**

Asistencia a conferencias

Preparación de trabajos

Asistencia a seminarios, tutorías, talleres

Exámenes

Estudio independiente y privado

Prácticas clínicas

Otras (por favor, especifique)

**47. ¿Ha implementado su departamento el sistema europeo de transferencia y acumulación de créditos (ECTS, por sus siglas en inglés)?**

- ☐ Sí
- ☐ No

**13. Sistema europeo de transferencia y acumulación de créditos ECTS**

**48. En términos de carga lectiva de los estudiantes, ¿a cuántas horas equivale 1 ECTS en su programa?**

☐ 25 horas

☐ 29 horas

☐ 26 horas

☐ 30 horas

☐ 27 horas

☐ No estoy seguro

☐ 28 horas

## 17. El Suplemento sobre diplomas

El Suplemento sobre diplomas (DS, por sus siglas en inglés) es un documento que se adjunta a un diploma de educación superior cuyo objeto es mejorar la "transparencia" internacional y facilitar el reconocimiento académico y profesional de las cualificaciones (diplomas, grados, certificados etc.) El Suplemento sobre diplomas está diseñado para ofrecer una descripción de la naturaleza, nivel, contexto, e impartición de los estudios que el estudiante, que aparece como titular en la cualificación original a la que se adjunta el suplemento, ha completado con éxito. No debe contener juicios de valor, declaraciones de equivalencia o sugerencias sobre reconocimiento. Se trata de una herramienta flexible no prescriptiva diseñada para ahorrar tiempo, dinero y trabajo. Se puede adaptar a las necesidades locales.

Se puede descargar más información desde la página Web [http://ec.europa.eu/education/lifelong-learning-policy/doc1239\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc1239_en.htm)

### 49. ¿Entrega su institución un Suplemento sobre diplomas?

- ☐ Sí, aunque solo a la finalización de los estudios
- ☐ Sí, aunque los estudiantes no hayan finalizado con éxito los estudios
- ☐ No
- ☐ No lo sé

**13. Página final**

**50. Le agradecemos que haya contestado a la encuesta.**

**Por favor, deje cualquier comentario que desee**

**enviarnos.**

	..

## **Appendix 11**

### **Notification email to the Heads of departments of the physiotherapy schools sent on 20<sup>th</sup> April 2011**

Dear Head of Department/Coordinator,

In 2009 I enrolled on a PhD at the Sheffield Hallam University, UK and started to study the influences of the Bologna Process on physiotherapy education across Europe. It is evident that there is no collective information on this and especially there appear no comparative studies across higher education that explores this phenomenon within physiotherapy. Over the past year, I have been designing a research method in order to help me investigate and explore this issue in depth. I am now reverting to you, since you have been identified as the Head of Department with responsibility for physiotherapy studies in your institution, and to invite you to participate on this study.

Within the next couple of days you will be receiving a survey from me at this same e-mail address. I would greatly appreciate it if you could take a few minutes from your busy schedule to complete it. By doing so you will help to ensure that the most comprehensive information possible would be collected before proceeding to the next phase of this study.

If you have any questions, feel free to contact me by reply to this e-mail or should you prefer call me at any time on +356 9942 4404.

Thank you in advance for your cooperation.

Best Regards,

**John Xerri de Caro**  
PhD student at Sheffield Hallam University



Dear Head of Department/Coordinator,

You are kindly invited to respond to this survey questionnaire that I have prepared as part of a PhD research. Before you decide, you may want to understand why this research is being done and what it will involve for you. Should you wish to clarify anything, please do not hesitate to contact me. This study is being carried out in part fulfilment of a research degree (PhD) that is exploring the influences of the Bologna Process in physiotherapy education across Europe.

I am attaching a copy of the questionnaire that you may print out and read through to facilitate your response. A translated version is also available in Spanish, German, Italian and French so that you may refer to this should you come across any difficulty when reading the text in English. The survey questionnaire is in English.

Should you wish to access the questionnaire immediately please follow this link now:  
[http://www.surveymonkey.com/s/BP\\_and\\_PTeducation\\_physioschools\\_survey](http://www.surveymonkey.com/s/BP_and_PTeducation_physioschools_survey)

**What is the purpose of this study?**

The purpose of this study is to understand the influences of the Bologna Process on physiotherapy education. The intention is to develop a tool that may be utilised to compare physiotherapy educational processes in Europe with the objectives as set out in the Bologna Process. This survey forms only part of the overall study.

**What are the aims of this study?**

To explore any changes in the governance of physiotherapy education that may have resulted as a response to the Bologna Process.

To understand the motivations for bringing about any such change in the governance of physiotherapy education at national level and also institutional level.

To examine the on-going processes of change in the governance of physiotherapy education and to assess how it is shaping the development of physiotherapy education in Europe.

**Why have you been invited?**

You have been selected to participate in this study since you have been identified as the Head of the Department/Coordinator in your institution with responsibility for physiotherapy education.

**Should you take part in this study?**

The decision to participate in this study is entirely voluntary. I would appreciate your participation since I have identified you amongst European peers and since I feel that you may provide me with a reasonable and timely response.

**What will your participation involve?**

Your participation in this study shall involve you responding to this survey questionnaire. This survey is being carried out in electronic format and will necessitate approximately 20 minutes to read through and complete the responses.

**What will happen to the results of the research study?**

This study is being carried out to fulfil a research degree (PhD) and the results shall form part of a final thesis that shall be written and presented for defence. Parts of the study may be collated for publication before the final defence of the thesis. It is envisaged that results from this study shall also be disseminated at appropriate conferences and congresses on physiotherapy education.

**Confidentiality**

All feedback responses shall be treated with the strictest confidence and shall only be available to me as the researcher and my supervisory team.

The source of the information shall be kept confidential and anonymous. The intent shall be to disseminate the findings with the broader scholarly community. The results shall be published representing regional and national developments rather than institutional developments, possibly based on a model of historical development in higher education.

**Who is sponsoring this study?**

The sponsor of the study has the duty to ensure that it runs properly. In this study, the sponsor is Sheffield Hallam University (UK).

**Who has reviewed this study?**

All research based at Sheffield Hallam University is looked at by a group of people called a Research Ethics Committee. This Committee is run by Sheffield Hallam University but its members are not connected to the research they examine. The Research Ethics Committee and the Independent Scientific Review Committee have reviewed this study and given their favourable opinion.

I would greatly appreciate your response within the coming 2 weeks.

Thank you.

John Xerri de Caro

Please follow the on-line link to access the survey questionnaire:

**[http://www.surveymonkey.com/s/BP\\_and\\_PTEducation\\_physioschools\\_survey](http://www.surveymonkey.com/s/BP_and_PTEducation_physioschools_survey)**

Dear Head of Department/Coordinator

**This is a gentle reminder to consider this email that is important for me to complete my research degree.**

**Your attention is greatly appreciated. Thank you.**

**Kindly ignore this message if you have already responded and thank you once again. I hope to compile enough information that will be sufficient to formulate a better understanding on the influences of the BP that I could share with the physiotherapy community.**

Attached copy of survey email

Dear Head of Department/Coordinator

**This is a third and final reminder to consider this email that is important for me to complete my research degree.** Your attention is greatly appreciated.

Up till now I have received a 25.1% overall response rate. Comparative educational research requires the contribution from a large number of institutions particularly in this case where I am investigating the influences of the Bologna Process on physiotherapy education across Europe. The current statistics for response per country (%) are as indicated hereunder:

Austria	28.6	Germany	27.3	Malta	100	Sweden	33.3
Belgium	7.7	Hungary	25	Montenegro	100	Switzerland	25
Bulgaria	0	Iceland	0	Netherlands	40	Turkey	25
CZ	33.3	Ireland	50	Norway	0	UK	35.5
Denmark	25	Italy	13.9	Portugal	22.2		
Estonia	50	Latvia	0	Slovenia	100		
Finland	25	Lebanon	16.7	Spain	28.6		

From the comments I have received it appears that the questionnaire did not take more than 10 – 15 minutes to complete. Your contribution shall be very valuable in determining the outcome of this research especially if you believe that the response rate for your country is low.

**Kindly ignore this message if you have already responded and thank you once again. I hope to compile enough information that will be sufficient to formulate a better understanding on the influences of the BP that I could share with the physiotherapy community.**

You are kindly invited to respond to this survey questionnaire that I have prepared as part of a PhD research. Before you decide, you may want to understand why this research is being done and what it will involve for you. Should you wish to clarify anything, please do not hesitate to contact me. This study is being carried out in part fulfilment of a research degree (PhD) that is exploring the influences of the Bologna Process in physiotherapy education across Europe.

This questionnaire may be accessed and addressed anonymously by following this link:  
**[http://www.surveymonkey.com/s/BP\\_and\\_PTeducation\\_physioschools\\_survey](http://www.surveymonkey.com/s/BP_and_PTeducation_physioschools_survey)**

I am also attaching a copy of the questionnaire that you may print out and read through to facilitate your response. A translated version is also available in Spanish, German, and Italian and French so that you may refer to this should you come across any difficulty when reading the text in English. The survey questionnaire is in English.

Thank you.

John Xerri de Caro

Please follow the on-line link to access the survey questionnaire:

**[http://www.surveymonkey.com/s/BP\\_and\\_PTeducation\\_physioschools\\_survey](http://www.surveymonkey.com/s/BP_and_PTeducation_physioschools_survey)**



## **Appendix 15      Notification email to Enphe country coordinators**

Dear

In 2009 I enrolled on a PhD at the Sheffield Hallam University, UK and started to study the influences of the Bologna Process on physiotherapy education. It is evident that there is no collective information on this and especially there appear no evaluative or comparative studies across higher education that explores this phenomenon. Over the past year, I have been designing a research method looking into this issue and a year ago, at the Riga conference for Enphe members, I was given the opportunity by the Enphe executive board to address the Enphe country coordinators meeting where I briefly explained the process of my study. In order to help me investigate and explore this issue in depth, I had asked the group to collaborate with me on this study.

Within the next couple of days you will be receiving a brief survey from me at this same e-mail address. I would greatly appreciate it if you could take a few minutes from your busy schedule to complete it. By doing so you will help to ensure that the most comprehensive information possible would be collected before proceeding to the next phase of this study.

If you have any questions, feel free to contact me by reply to this e-mail or should you prefer call me at any time on +356 9942 4404.

Thank you in advance for your cooperation.

Best Regards,

John

## **Appendix 16      First survey email to Enphe country coordinators**

Dear Enphe country coordinator

You are kindly invited to respond to this survey questionnaire that I have prepared as part of a PhD research. Before you decide, you may want to understand why this research is being done and what it will involve for you. Should you wish to clarify anything, please do not hesitate to contact me. This study is being carried out in part fulfilment of a research degree (PhD) that shall be exploring the influences of the Bologna Process in physiotherapy education across Europe. The attached annex may serve to assist you in understanding some of the terms used in the questionnaire. I am also attaching a copy of the questionnaire that you may print out and read through.

Should you wish to access the questionnaire immediately please follow this link now:  
[http://www.surveymonkey.com/s/BP\\_and\\_PTeducation\\_enphe\\_coordinators\\_survey](http://www.surveymonkey.com/s/BP_and_PTeducation_enphe_coordinators_survey)

### **What is the purpose of this study?**

The purpose of this study is to understand the influences of the Bologna Process on physiotherapy education. The intention is to develop a tool that may be utilised to compare physiotherapy educational processes in Europe with the objectives as set out in the Bologna Process. This survey forms part of the overall study.

### **What are the aims of this study?**

To explore any changes in the governance of physiotherapy education that has resulted as a response to the Bologna Process;

To understand the motivations for bringing about any such change in the governance of physiotherapy education at national level and also institutional level;

To examine the on-going processes of change in the governance of physiotherapy education and how it is shaping the development of physiotherapy education in Europe.

### **Why have you been invited?**

You have been selected to participate in this study since you are the country coordinator in Enphe and as such you represent those institutions from your country that form part of the Enphe network.

### **Should you take part in this study?**

The decision to participate in this study is entirely voluntary. I would appreciate your participation since I have identified you amongst European peers and since I feel that you may provide me with a reasonable and timely response.

### **What will your participation involve?**

Your participation in this study shall involve you responding to this survey questionnaire. This survey is being carried out in electronic format and will necessitate approximately 20 minutes to read through and complete the responses.

Following the return of the survey questionnaire, a sample from the country coordinators shall be selected to be followed up by an interview. Should you be selected for an interview, and should you agree to participate, you shall be contacted by the researcher so that a mutually convenient time will be arranged for this. It is anticipated that the interview should last

approximately an hour and will be carried out using Skype programme. If at all possible, a face-to-face interview could be arranged should the circumstances facilitate such.

**What will happen to the results of the research study?**

This study is being carried out to fulfil a research degree (PhD) and the results shall form part of a final thesis that shall be written and presented for defence. Parts of the study may be collated for publication before the final defence of the thesis. It is envisaged that results from this study shall also be disseminated at appropriate conferences and congresses on physiotherapy education.

**Confidentiality**

All feedback responses shall be treated with the strictest confidence and shall only be available to me as the researcher.

The source of the information shall be kept confidential and anonymous. The intent shall be to disseminate the findings with the broader scholarly community. The results shall be published representing regional developments rather than national developments, possibly based on a model of historical development in higher education.

**Who is sponsoring this study?**

The sponsor of the study has the duty to ensure that it runs properly. In this study, the sponsor is Sheffield Hallam University (UK).

**Who has reviewed this study?**

All research based at Sheffield Hallam University is looked at by a group of people called a Research Ethics Committee. This Committee is run by Sheffield Hallam University but its members are not connected to the research they examine. The Research Ethics Committee and the Independent Scientific Review Committee have reviewed this study and given favourable opinion.

I would greatly appreciate your response within the coming 2 weeks.

Thank you.

Best Regards and Warm wishes

John

Please follow the on-line link to access the survey questionnaire:

[http://www.surveymonkey.com/s/BP\\_and\\_PTeducation\\_enphe\\_coordinators\\_survey](http://www.surveymonkey.com/s/BP_and_PTeducation_enphe_coordinators_survey)

## **Appendix 17**

### **Annex to Questionnaire to Enphe country coordinators**

This annex has been designed to assist the respondent whilst answering the questions set out in the survey questionnaire. The information provided hereunder provides only a description of some of the terms used.

#### Question 6

##### **Traditional developments of higher education:**

Three major systems are identified that have historically formed the elements of higher education and which have influenced developments elsewhere. The ‘personal development model’ or the ideal of liberal education has for more than 300 years influenced Anglo-Saxon higher education. A student’s character or personality formation came about through learning and specific communal lifestyle and extra-curricular activities. In contrast, in Germany, the ‘research model’ or Humboldtian system prevailed. This was achieved through a specific understanding of gaining empirical knowledge, focused more on the discipline rather than the student. The third system is the Napoleonic or French one, the ‘professional training model’ that places most of the emphasis on learning for the profession, leaving research outside the university (Gellert, 1999).

#### Question 13

##### **The Diploma Supplement (DS):**

The DS is a document attached to a higher education diploma aiming at improving international ‘transparency’ and at facilitating the academic and professional recognition of qualifications (diplomas, degrees, certificates etc.) The DS is designed to provide a description of the nature, level, context, content and status of the studies that were successfully completed by the individual named on the original qualification to which the supplement is appended. It should be free from any value-judgements, equivalence statements or suggestions about recognition. It is a flexible non-prescriptive tool which is designed to save time, money and workload. It is capable of adaptation to local needs. Further information may be downloaded from [http://ec.europa.eu/education/lifelong-learning-policy/doc1239\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc1239_en.htm)



### **The Degree Structure:**

The second objective of the Bologna Process speaks about the adoption of a degree structure system that is based on two main cycles. Subsequently a third cycle was added. These are commonly referred to as the 1<sup>st</sup> cycle or Bachelor degree; the 2<sup>nd</sup> cycle or Master degree and the 3<sup>rd</sup> cycle or Doctoral degree. Within the 1<sup>st</sup> cycle it is possible to establish intermediate qualifications.

### **The European credit transfer and accumulation system (ECTS):**

The ECTS is a student-centred system based on the student workload required to achieve the objectives of a programme, objectives preferably specified in terms of the learning outcomes and competences to be acquired. ECTS is based on the principle that 60 credits measure the workload of a fulltime student during one academic year. The student workload of a full-time study programme in Europe amounts in most cases to around 1 500 to 1 800 hours per year and in those cases one credit stands for around 25 to 30 working hours. For further information you may download the entire Users' Guide from [http://ec.europa.eu/education/lifelong-learning-policy/doc/ects/guide\\_en.pdf](http://ec.europa.eu/education/lifelong-learning-policy/doc/ects/guide_en.pdf)

### **Mobility:**

Mobility refers to the effective exercise of free movement of individuals connected to higher education without prejudicing their statutory rights. With particular attention to students for access to study and training opportunities; and for teachers, researchers and administrative staff – the recognition and valorisation of periods spent in a European context researching, teaching and training.

### **The European Standards and Guidelines for quality assurance (ESG):**

The ESG were developed by the European Association for Quality Assurance in Higher Education to create an agreed set of standards, procedures and guidelines on quality assurance. The purpose of these standards and guidelines is to provide a source of assistance and guidance to both higher education institutions in developing their own quality assurance systems and agencies undertaking external quality assurance, as well as to contribute to a common frame of reference, which can be used by institutions and agencies alike. It is not the intention that these standards and guidelines should dictate practice or be interpreted as prescriptive or unchangeable. The complete guidelines may be downloaded from <http://www.enqa.eu/pubs.lasso>



## **National Qualifications Framework (NQF) and European Qualifications Framework (EQF):**

A Qualification Framework is primarily an official document that clearly defines each and every qualification brought under it. It may also provide a hierarchy of qualifications. In system view it is a meta-data model that is an all encompassing framework to integrate the qualifications issued by different academic bodies into a common structure. It consists of a set of common reference points, referring to learning outcomes, supported by a range of tools and techniques, regardless of the system where a particular qualification was acquired. Each country could have its own framework, hence NQF. The EQF aims to relate different countries' national qualifications systems to a common European reference framework. Individuals and employers will be able to use the EQF to better understand and compare the qualifications levels of different countries and different education and training systems. Agreed upon by the European institutions in 2008, the EQF is being put in practice across Europe. It encourages countries to relate their national qualifications systems to the EQF so that all new qualifications issued from 2012 carry a reference to an appropriate EQF level. Further information on the EQF and QF may be downloaded from [http://ec.europa.eu/education/lifelong-learning-policy/doc44\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm)

### **Cited reference:**

GELLERT, C. (1999). The changing conditions of teaching and learning in european higher education. In: GELLERT, C. (ed.). Innovation and adaptation in higher education. 1st ed., England, Jessica Kingsley Publishers Ltd, 9-31.

## **Appendix 18**

### **First and final reminder to the Enphe country coordinators**

Dear

A few weeks ago I sent you a survey via email, asking you to participate in a study that I am currently carrying out in relation to research at PhD. As of today I have not received a completed survey from you. I realise that this may be a busy time however I have contacted you and others in Enphe in the hope of obtaining the insights that only you can provide.

In case that you deleted the previous email, I am attaching it with this new one.

You may respond to the survey by following the link from here:

[http://www.surveymonkey.com/s/BP and PTeducation enphe coordinators survey](http://www.surveymonkey.com/s/BP_and_PTeducation_enphe_coordinators_survey)

Should you have any difficulties please feel free to contact me.

Thank you for your time and patience.

Best Regards

John

## **Appendix 19**

## **Invitation to participate in the interview**

Dear

Thank you for finding the time to participate in the survey questionnaire that was sent to the ENPHE coordinators as part of my PhD research work on the influences of the Bologna Process in physiotherapy education. Your contribution has helped me to continue exploring the European developments in this area. The data collected is currently being put together and analysed.

My research study shall now embark on another phase that involves interviewing a purposefully selected group of ENPHE coordinators. The choice of the participants has been determined by a protocol that was accepted by the Research and Ethics Committee at Sheffield Hallam University. The survey responses have been grouped under the different traditional development models in higher education.

In your survey response, you have made reference to the traditional developments in higher education in your country as following the Research Model.

I wish to invite you to continue your participation in my study through an interview. This interview shall be conducted at a time that is mutually convenient. It is anticipated that the interview should last approximately an hour and could be carried out using the Skype programme. If at all possible, a face-to-face interview could be arranged should the circumstances facilitate such.

If you agree to participate, I would appreciate your feedback shortly, so that we could get organised. The next step for me shall be to send you a consent form following which we shall agree on a date and time for the interview.

In anticipation of your response,

Best Regards,

John

## **Appendix 20**

### **The Participant Information Sheet**

## **Participant Information Sheet**

Study title: The Bologna Process and physiotherapy programmes of study across Europe

Researcher: John Xerri de Caro

Tel. no.: (+356) 9942 4404

(+356) 2340 1894

Study Sponsor: Sheffield Hallam University

You are kindly invited to take part in this research study. Before you decide, you may want to understand why this research is being done and what it will involve for you. Should you wish to clarify anything, please do not hesitate to contact me.

This study is being carried out in fulfilment of a research degree (PhD) and shall be exploring the influences of the Bologna Process in physiotherapy education across Europe.

Participant name:

You shall be given a copy of this information sheet to keep. It contains the necessary information that you may require should you wish to address any queries or complaints.



**What is the purpose of this study?**

The purpose of this study is to understand the influences of the Bologna Process in physiotherapy education. The intention is to develop a tool that may be utilised to compare physiotherapy educational processes in Europe with the objectives as set out in the Bologna Process.

**What are the aims of this study?**

1. To explore any changes in the governance of physiotherapy education that have resulted as a response to the Bologna Process;
2. To understand the motivations for bringing about any such change in the governance of physiotherapy education at national level and also institutional level;
3. To examine the on-going processes of change in the governance of physiotherapy education and how it is shaping the development of physiotherapy education in Europe.

**Why have you been invited?**

You have been selected to participate in this study since you are the national coordinator or the substitute coordinator in ENPHE and as such you represent those institutions from your country that form part of the ENPHE network.

**Should you take part in this study?**

The decision to participate in this study is entirely voluntary. You may refuse to participate right from the start or you may withdraw from the study at any time after agreeing to participate. Your refusal or wish to withdraw will bear no influence on your position within ENPHE.

**What will you benefit from by participating in this study?**

If you participate in this study you shall be contributing towards further knowledge in the field of physiotherapy education. There is also the likely chance that your participation will help you to understand better the Bologna Process.

**What will your participation entail in terms of expenses and payments?**

No expenses are anticipated to be incurred by participating in this study and no payments shall be effected for participation. Participation is strictly on a voluntary basis.

### **What will your participation involve?**

You have already responded to a survey questionnaire following which you have been chosen for an interview.

Following the return of the survey questionnaire, a sample has been purposely selected to be followed up by an interview. Should you agree to participate, you shall be contacted once again by the researcher so that a mutually convenient time will be arranged for this. It is anticipated that the interview should last approximately an hour and will be carried out using Skype programme. If at all possible, a face-to-face interview could be arranged should the circumstances facilitate such.

### **What are the possible disadvantages of taking part?**

Depending on the time it will take to complete the survey questionnaire and the time it will take to complete the interview, the major disadvantage shall consist of a small inconvenience in terms of finding the time to participate.

### **Confidentiality**

The source of the information shall be kept confidential and anonymous. The intent shall be to disseminate the findings with the broader scholarly community. The results shall be published representing regional developments rather than national developments, based on a model of historical development in higher education.

If you accept, information pertaining to national developments may be reported. Acceptance, will not limit any future decision to withdraw from the study in total or to revoke acceptance.

The interviews will be recorded and then transcribed *verbatim*. It shall be the responsibility of the researcher to check that the recording and the transcript shall be the same. Once transcribed, recordings shall be erased and the transcriptions stored and managed on a password-protected personal computer. Identifying details shall be removed from the final report and any publication. The written transcripts will have all links to you removed at the end of the study and will then be kept for a period of five years and shall not be used for any purpose other than the research.

The documents relating to the administration of this research, such as the consent form you sign to take part, will be kept in a folder called a 'project file'. This shall be locked away securely together with the transcripts.

**What will happen to the results of the research study?**

This study is being carried out to fulfil a research degree (PhD) and the results shall form part of a final thesis that shall be written and presented for defence. Parts of the study may be collated for publication before the final defence of the thesis. It is envisaged that results from this study shall also be disseminated at appropriate conferences and congresses on physiotherapy education.

**Who is sponsoring this study?**

The sponsor of the study has the duty to ensure that it runs properly. In this study, the sponsor is Sheffield Hallam University (UK).

**Who has reviewed this study?**

All research based at Sheffield Hallam University is looked at by a group of people called a Research Ethics Committee. This Committee is run by Sheffield Hallam University but its members are not connected to the research they examine. The Research Ethics Committee and the Independent Scientific Review Committee have reviewed this study and given favourable opinion in November 2010.

**Duration of study**

This study shall run between May 2011 and September 2011.

**Language of study**

This study shall be conducted in the English language.

**Privilege of complaint**

If you have any queries or questions please contact the researcher:

E-mail: john.xerri-decaro@um.edu.mt

Phone: (+356) 9942 4404

**Alternatively**, you may contact the Director of Studies at Sheffield Hallam University, Ms. Maria Burton, e-mail - M.Burton@shu.ac.uk

## **Appendix 21**

The Participant Consent Form

**Participant Consent Form**

Study title: The Bologna Process and physiotherapy programmes of study across Europe

Researcher: John Xerri de Caro

Tel. no.: (+356) 9942 4404

(+356) 2340 1894

Study Sponsor: Sheffield Hallam University

Director of Studies: Maria Burton (m.burton@shu.ac.uk)

Participant Name:

**Please read through the following statements and tick the box to show that you have read and understood them, and that you agree with them.**

	<b>Please consider and tick all boxes as they apply.</b>	
1.	I confirm that I have read and understood the information sheet dated May 2011 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="checkbox"/>
2.	I understand that my involvement in this study is voluntary and that I am free to withdraw at any time without giving reason.	<input type="checkbox"/>
3.	I understand that relevant sections from the data collected during the study may be looked at by responsible persons from the Sponsor, the Research Ethics Committee and from the supervisory team. I give permission for these individuals to have access to data indicating my participation.	<input type="checkbox"/>
4.	I understand that certain information relating to national developments may be considered and reported for purposes of comparison and exploration and that such information shall be reported anonymously. I give my permission for such information relating to my participation to be processed as such.	<input type="checkbox"/>
5.	I agree to take part in this study.	<input type="checkbox"/>





**To be completed by the participant:**

I agree to take part in the above study.

Name:

e-mail:

Signature:

Date:

**To be completed by the person obtaining consent:**

I confirm that I have explained the nature, purposes and possible effects of this research study to the person whose name is printed above.

Researcher: John Xerri de Caro

Signature:

Date:

**There are two prints of this document. One copy is held by the participant and the original is held in the Project File.**

Participant signature:

Researcher signature:

## **Appendix 22**

### **Approval of the Research Programme**

GT/RDSC

17 November 2009

Tel no: 0114 225 4047

Fax no: 0114 225 2167

E-mail: g.taylor@shu.ac.uk

Mr J Xerri De Caro  
2 Alley 1  
Triq Il Pjazzetta  
Attard  
Atd 1071

Dear Mr Xerri De Caro

**Application for Approval of Research Programme**

Your application for approval of research programme was considered at the Research Degrees Sub-Committee meeting held on 11 November 2009 and I am pleased to inform you that it was approved. Please find attached rapporteurs' comments for your information.

Please find attached an information sheet: 'Principal Stages in the progress of a Research Degree Student' outlining the timescales involved for completion of your research degree. The next stage for you will be the approval of your thesis title and examining team. These details should be proposed on an RF3 by your Director of Studies, and submitted to the Graduate Studies Team at least 4 months in advance of submission of your thesis. In your case we would expect to receive an RF3 by no later than 2 May 2012. Your registration details are also attached.

If you have any queries, please contact the Graduate Studies Team, Floor 1, Oneleven Building, City Campus, contact details above.

Yours sincerely



Secretary  
Research Degrees Sub-Committee

cc Director of Studies  
Head of Programme Area (Research Degrees)  
Research Administrator

Enc

## **Appendix 23**

Research Ethics Review Group

Favourable opinion and acceptance of study for continuation

**Faculty of Health and Wellbeing Research Ethics Committee  
Health & Social Care Research Ethics Review Group**

**Report Form**

Title: The Bologna Process and physiotherapy programmes of study across Europe.

Principal Investigator: John Xerri de Caro

Recommendation:

Acceptable:

✓

Not acceptable, see comments:

Acceptable, but see comments:

Comments:

See attached feedback on review forms.

Signature :  Date: 1 November 2010.

Peter Almark,  
Chair  
HSC Research Ethics Review Group

*Please remember that an up-to-date project file must be maintained for the duration of the project and afterwards. The project file might be inspected at any time.*

**Note:** Approval applies until the anticipated date of completion unless there are changes to the procedures, in which case another application should be made.

**Centre for Health and Social Care Research**

Faculty of Health and Wellbeing Sheffield Hallam University Montgomery House  
32 Collegiate Crescent Collegiate Crescent Campus Sheffield S10 2BP UK  
Telephone +44 (0)114 225 5854 Fax +44 (0)114 225 4377  
E-mail chscr@shu.ac.uk www.shu.ac.uk/chscr



## **Appendix 24**

Endorsement for an extension to complete the study

SHARPENS YOUR THINKING

GT/RDSC  
25 July 2012

Tel no: 0114 225 4047  
E-mail: g.taylor@shu.ac.uk

Mr J Xerri De Caro  
2 Alley 1  
Triq Il Pjazetta  
Attard  
Malta  
Atd 1071

Dear Mr Xerri De Caro

**Application for Additional Time to Complete**

I am writing to inform you that on 26 July 2011, the Chair of the Research Degrees Sub-Committee endorsed the action of the Head of Programme Area (Research Degrees) in approving your application for additional time to complete your research degree.

Your new expiry date is 1 February 2013.

The next stage for you will be the approval of your thesis title and examining team. These details should be proposed on an RF3 by your Director of Studies, and submitted to the Graduate Studies Team at least four months prior to the submission of your thesis.

If you have any queries, please contact the Graduate Studies Team based at City Campus, using the contact details above.

Yours sincerely



Secretary  
Research Degrees Sub-Committee

cc      Director of Studies  
          Head of Programme Area (Research Degrees)  
          Research Administrator

## **Appendix 25**

### **Mapping of the Findings**

Mapping and Interpretation						
Themes	Sub themes		References	Emerging Theory/Concepts	Differential Impact	Relative Bologna Process
Institutional Status	Academic vs Vocational Profession		A.9.1	Driver for change	Institutional	1, 2 and 6
			A.10.1		Economic	
			A.9.2		Cultural	
			H.10.2			
Autonomy	Influence of Professional practice	Traditions	B.11.1		Cultural	1,4,6
			B.3.1			
			B.4.1			
	Boundaries		B.9.1, B.4.1			
	Institutional		B.4.2		Institutional	
	Recognition		B.4.3		Cultural	
Degree Structure and Duration of Programmes	Curriculum	Cultural	C.2.1		Cultural	2, 3, 4 and 6
	Previously shorter degree			Change for change sake or change with a purpose?	Institutional	
	Short 3 year cycle		A.9.1, C.2.2, C.7.1		Institutional	
	Threat	Quality	AG 11.1	What guides the purpose: status, power, peers		
	Implications		C.7.1		Economic	
	Restructuring	Opportunities	C.8.1, L.9.1c	Change	Institutional	
	Justification for length	Requirement of BP	H.10.2		Institutional	
		No Compromise	H.10.2, I.1.1		Institutional	
		Omits basic knowledge	H.10.3			
		Financial	H.9.1, L.10.2.c		Economic	
		Social dimensions / entry level	J.10.1, J.10.2			
	Justification for change	Not to be left behind	I.2.1.a	Change		
		To avoid comparisons to the past	I.2.1.b			
		Contradictions to change	I.2.2			
Diversity	Issues	Cultural differences	F.4.1	Theory on diversity	Cultural and Institutional	1,2,6
		Protection of Identity	F.12.1, G.12.1			
		Different requirements	F.12.2			
		Content not framework	F.3.1, B.11.1,			
			B.3.1, F.12.1,			
		Allows innovation	F.9.1			
		Conditions to exist	G.10.1, G.11.3, N.4.2			
Harmonisation	Issues	Facilitates awareness	G.12.1	Consensus	Institutional	1,2,4, and 6
		Conditions to exist	G.9.1, M.10.1	Harmonisation of Law		
		Avoiding dysfunction	I.2.3			
		Bridging gaps	M.1.1			
		Security	M.2.3.b			
		Common Core	M.2.1, N.6.2			
		Comparison for change	M.2.3.a	Change		
		Facilitates mobility	M.2.4.a, M.3.1.a			
		Avoiding competition	M.2.4.b			
		Defining levels	M.3.1.a			
		With respect to differences	M.4.1, M.3.1.b,			
		Barriers	M.8.1			
System of credits	Comparability Issues	Clinical practice/educ.	K.11.1	Comparison	Institutional	1,3 and 5
		Programmes	K.8.1.a, K.8.1.b, K.9.1			
		Ideal time	K.11.2, K.3.1			
		Balance between contact and self-study	AE.1.2, AE.2.4			
	Fewer credits	Decreased clin. Practice	K.7.1			
		Knowledge Gaps (Quality)	K.7.3.a, b			
		Longer term benefits	K.7.3. c,d			
		Student attitudes	K.7.3. e			
	Changing systems		AE.3.3			
Influences on the educational system	Unknown		L.10.1, Q.11.1.a	Unbeknownst	Institutional	6
	Struggle		L.10.2.a			
	Opportunity	For furthering HE	L.10.2.b			
		Student centred learning	I.9.1.a	Change	Cultural	
		Student development	I.9.1.c			
	Threats		L.10.2.c			
	Change in teaching approach	Delivery of content	L.9.1.b	Change	Cultural	
	Change in student mentality		L.9.1.d			
Europeanisation	Impact in and across Europe	Bringing education closer to profession	N.11.1.b	Europeanisation		6
		Great expectations	N.2.1			
		Cultural barriers	N.12.1		Cultural	
		Dialogue	N.2.3.a, N.4.1.a, N.4.1.c, N.6.2			
		Political pressure	N.6.1			
		Employment relevance	N.9.1		Institutional	
		Shadow/copy similar practices	Q.8.4		Socio-economic	



Mapping and Interpretation						
Themes	Sub themes		References	Emerging Theory/Concepts	Differential Impact	Relative Bologna Process
Important changes	Curriculum development		O.1.1, O.2.2, O.8.1	Change	Institutional	1 and 4
	Facilitated mobility		O.1.2			
	Transparency	Education levels	O.10.1			
		Learning goals	O.10.2			
	More active strategies	Student centred learning	O.12.1			
		Learning strategies	O.2.1, O.3.1,			
		Teaching strategies	O.8.2			
		Credit system				
		Mobility				
		Internationalisation				
External influences to the BP	Recognition of degree structure		O.2.2, O.4.1, O.4.4	Recognition and change	Cultural Social Socio-economic	2 and 5
	Drivers for Change		P.10.1			
		Professional development	P.3.1			
	Job security		P.2.6			
	National reforms	Influence of Quality Education	P.4.1, P.4.2			
	Registering councils/bodies		P.9.1			
Influences of the Bologna Process	Direct Influences	On duration of programmes	Q.11.1.d, Q.10.1, Q.8.1		Institutional	1,2,3,5, and 6
		Transparency	Q.11.1.b, Q.3.1.b			
		Method of assessment and teaching	Q.11.1.c, Q.3.3, Q.4.5.a, Q.8.3			
		On teachers	Q.12.2, Q.4.5.b			
		Contextualised education	Q.12.5, Q.3.1.b			
		Professional Egalitarianism	Q.4.3, Q.4.4.a, Q.7.2	Egalitarianism		
		Educational Egalitarianism	Q.4.3, Q.4.4.b	Egalitarianism		
		Quality	Q.12.6			
		Comparability / harmonisation	Q.3.1.a			
		on general governance	Q.3.6			
		On communication	Q.4.1, Q.5.2.b			
	Relating back to Bologna		Q.11.2			
	Comparison to USA/Australia		Q.5.2.a	Egalitarianism		
	Political influences		Q.6.1.a, Q.6.2.a			
		for equality	Q.6.1.b, Q.6.2.b	Egalitarianism	Political	
Misconceptions / misunderstandings / misinterpretations		with resulting need to change and consequences	Q.6.1.c			
			Q.6.3			
	Limited by financial influences	Duration of programmes	Q.9.1		Economic	
Duration of programmes			S.10.1	Unbeknownst		1,2,3, and 4
	Organisation of programmes		S.5.1			
	Exchange		S.5.2			
	ECTS		S.5.3			
Mobility	Facilitated mobility	in theory	T.1.1.a	Europeanisation	Institutional	4 and 6
		difficult process	T.1.1.b			
	Beauocratic obstacles		T.9.2.b			
		Level rating on competences	T.1.3.a			
	Restrictions	Short degrees	T.1.3.b, T.9.2.a			
	Favourable conditions	English	T.10.1.a, T.2.4			
		Guidance in decision making	T.10.1.b, T.2.3			
		Personal and prof development	T.11.2			
		Life experience	T.2.5			
	Non-favourable conditions	Lack of defined interest	T.8.1			
Negative Aspects	One-size-fits-all		U.1.1	Unbeknownst		5
	users not always informed	Implications?	U.1.2			
	Poor attitudes relinquishing the opportunity for change	Political opportunities	U.1.4.a, X.6.1		Political	
		No opportunity at all	U.1.4.b, U.1.4.c			
		Pragmatic approach	U.1.4.d			
	Tight and strict regulations	No compromise	U.1.5		Institutional	
	Beaurocracies and misinterpretations	Poor practices	U.12.2			
		Less quality				
	Personal insecurity		U.2.1		Change	
	Opening up comes with a price	More autonomy, less hours, less quality	U.4.1, U.4.2,			
	Socio-economic influences		U.4.3		Socio-economic	
Obstacles to development	Funding opportunities for 2nd and 3rd cycles	University vs UAS (1st cycle)	V.1.1		Economic	1, 2 and 3
	Comparability issues	Hours vs. Competences	V.10.1		Institutional	
	All-or-nothing	Different credits	V.12.3, V.9.4		Institutional	
	Not knowing		V.9.1	Unbeknownst		
Perceived threats by others	A minimum is a must	Hours and competences	W.11.1, X.4.5.a, X.4.5.b	Harmonisation	Institutional and cultural	1, 3 and 5
		Reduced Clinical practice results in poorer product	AG.1.1			
			AG.1.2			
	Different understandings on BP					



Mapping and Interpretation							
Themes	Sub themes		References	Emerging Theory/Concepts	Differential Impact	Relative Bologna Process	
Positive aspects	Upgrade in education level		X.1.1, X.2.6, X.4.2	Change driver		5	
	Opportunity to improve		X.2.5, X.4.3, X.4.4				
	Clear framework		X.1.2, X.2.8	Harmonisation			
	Harmonised framework	Comparability	X.2.1, X.4.1.b, X.8.2				
	Reflections	Engagement	X.12.1				
		Description	X.12.2				
	Opportunities	Better professional recognition	X.7.1, AA.4.1	Egalitarianism			
	Implementation	Quality	X.12.4				
	Widening discussion	Students, teachers, profession	X.2.2, X.2.3, X.4.1.a, X.4.1.c				
	Changing aspirations		X.2.10				
Relation to the Profession	Dependent on differing functions		AA.11.1		Cultural	4	
		Influencing mobility	AA.12.1				
	Entry Level into profession		AA.3.1				
Students perspective (in the view of course leaders)	Difficulties in understanding the systems	ECTS	AC.1.1	Unbeknownst	Institutional	3	
		Old model vs. new model	AC.2.4				
		what to know'	AC.9.1				
		Knowledge of the BP	AC.10.1				
	Administrative changes		AC.12.1				
	Better integration/recognition		AC.2.2				
	New methods of learning		AC.8.1				
Teachers' Attitudes	Not knowing		AF.10.1, AF.9.1	Unbeknownst	Institutional		
Threats	Change as threat		AG.6.1	Change			